AUTHORS: Glushkova, V. P., and Kocheshkov, K. A., Corresponding Member AN USSR. 20-2-19/50

TITLE: A New Method of Synthesis for Organothallium Compounds of the $ArTlX_2$ Class (Novyy metod sinteza talliyorganicheskikh soyedineniy klassa $ArTlX_2$).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 255-259 (USSR)

ABSTRACT: The absence of reliable production methods represents a considerable gap in the chemistry of the above-mentioned compounds and therefore the $ArTlX_2$-class is not easily accessible. The Challenger method (over organoboron compounds) consists of several stages and besides leads to secondary processes. Thus some authors described $ArTlX_2$ (X=haloid) as colored substances, when produced according to Challenger, whereas in reality they are colorless (see below). In this paper the authors for the first time described the product on method of $ArTlX_2$ (X=rest of an organic acid) with the use of organic acids of trivalent thallium in a reaction with organomercury compounds. The reaction which rapidly proceeds

Card 1/3

at room temperature leads with good yields to excellently crystallizing compounds of the $ArTlX_2$-class. They are stable, do not tend toward secondary transformations and are colorless. When the salts of organic acids are used, the reaction can at choice (according to the molar relations selected) be made to take two directions (equations and). When starting from the corresponding organomercury compounds, the organothallium compounds $ArTl(OOCR)_2$ or $Ar_2TlOOCR$ can also be attained with substituents in the nucleus. The compounds obtained by the authors are identical with those that are synthesized according to their own method of a direct thallination. Phenylthallium-isobutyrate can thus be produced from benzene and thallium-triisobutyrate (90 % yield). The reaction "inverse to disproportionation" also leads to colorless organothallium compounds with a quantitative yield. The replacement of the rest of an organic acid by haloid did here not lead to the formation of color either. Thus the color described in publications is the result of admixtures. An experimental part with the usual data follows.

A New Method of Synthesis for Organothallium Compounds of the $ArTlX_2$-Class SOV/20-2-19/50

There are 6 references, 4 of which are Slavic

ASSOCIATION: Physico-chemical Institute imeni L. Ya. Karpov
Fiziko-Khimicheskiy institut im. L. Ya. Karpova).

SUBMITTED: May 10, 1957

AVAILABLE: Library of Congress

Card 3/3

507/70-3-5/24

AUTHORS: Zvonkova, Z.V. and Glushkova, V.P.

TITLE: The Crystal Structure of p-bromphenylboric Acid (Kristallicheskoye stroyeniye p-bromfenilbornoy kisloty)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 5, pp 559-563 (USSR)

ABSTRACT: 40 crystals of $p\text{-}BrC_6H_4B(OH)_2$ from various solvents were examined by X-ray diffraction. There appeared to be no piezoelectric effect. The cell was found to be hexagonal with $a = 28.73$ and $c = 9.74$ A and space group $C6/mcc = C_{6h}^2$ with $Z = 36$ and $d_{calc.} = 1.72$; $d_{obs.} = 1.67$ g/cm^3. There are 576 atoms in the unit cell. The Patterson functions $F^2(hk0)$ and $F^2(hkl)$ were constructed which showed only peaks corresponding to Br-Br vectors. The Br atoms were found to lie in mirror planes with $z = 0$ and $z = 1/2$. It was assumed that the atoms Br, C_1, C_4 and B lie triply in the positions 12(e). The atoms C_2, C_3, C_5, C_6, O_1, O_2 and H occupy the general positions 24(m). The

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SOV/70-5-5-5/24

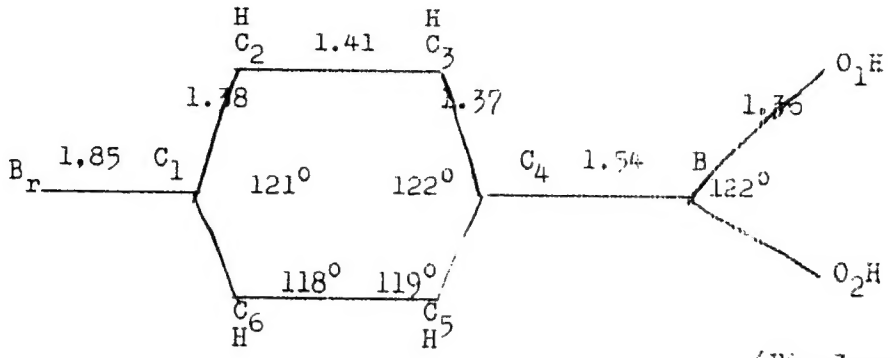
The Crystal Structure of p-bromphenylboric Acid

co-ordinates of the three independent Br atoms were found from F^2 series. Weissenberg photographs were taken for 7 layers about the c axis and these were connected by a -axis photographs. In all, 588 independent reflections were collected. The sections at xy0 and x, y, 0.123 were calculated. The heights of the three Br peaks were 85, 91 and 82 and of the C atoms were 16-20. The Br peaks were thought to be slightly lowered by their antisymmetric arrangement. The final co-ordinates are entered in Table 2, p 560. When a temperature factor of B=4 was applied, a final reliability factor of R=24% was obtained. The angles relating the plane of the molecule to the 010 plane are $\phi_1 = 41^0$, $\phi_2 = 52^0$ and $\phi_3 = 50^0$. The bond lengths and angles are:

Card 2/5

SOV/70-3-5-5/24

The Crystal Structure of p-bromphenylboric Acid



(Fig 3, p 561).

The Br-C bond length is 1.85 A comparing with the values of 1.85 and 1.87 reported in other compounds. The maximum value of the deviation of individual molecular dimensions from the mean over the three molecules is 0.03 A. The C_1-C_2 (and C_1-C_6) bonds are shortened to 1.38 and the C_3-C_4 (and C_4-C_5) to 1.37. The C_2-C_3 (C_5-C_6) bonds are

Card3/5

The Crystal Structure of p-bromphenylboric Acid

lengthened to 1.41. Similar observ tions have been mde in benzoic acid. In captax (2-mercaptobenzthiazol) deformation was also measured. These results show the changes in the interatomic distances due to the differing participation of the s and p electrons in the bonds. An estimate of the intermolecular radius of C can be obtained (1.67 A) which is near to the values in graphite (1.675) and in captax (1.685). The introduction of the acceptor group $B(OH)_2$ decreases the radius from the value of 1.80 found in benzene to this value. The benzene nucleus has become finer and the pi-electron cloud is decreased.

Acknowledgments are made to Z.P. Linina, A.N. Khvatkina and A.N. Abramova.

Card 4/5

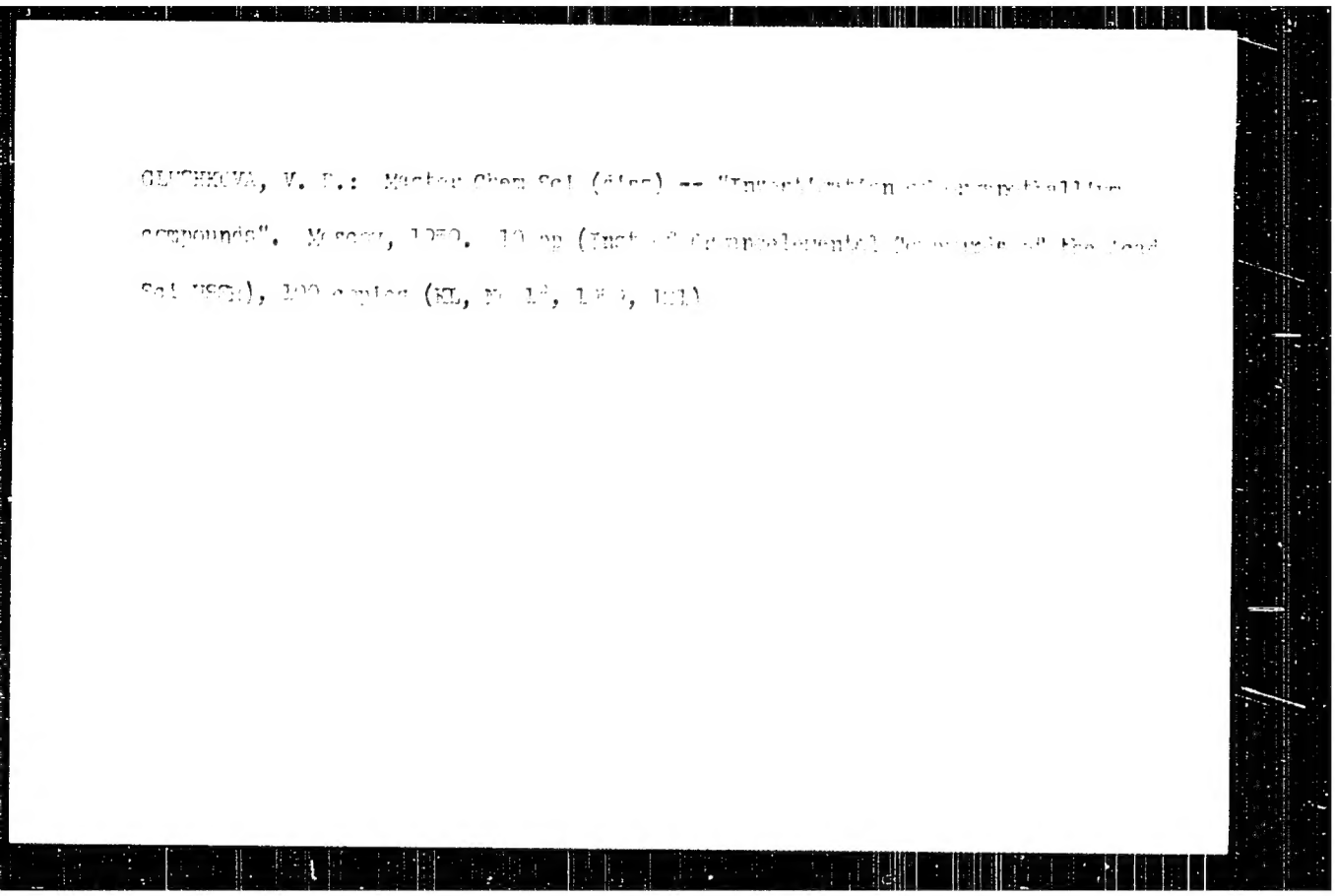
The Crystal Structure of p-bromphenylboric Acid SOV/70-3-5-5/24

There are 6 figures, 2 tables and 10 references, 6 of which are Soviet, 3 English and 1 Scandinavian

ASSOCIATION: Fiziko-khimicheskiy institut im. L.Ya. Karpova (Physico-chemical Institute im. L. Ya. Karpov)

SUBMITTED: July 1, 1957

Card 5/5



GLUSHKOVA, V. P.: Master Chem Sci (diss) -- "Thermal [illegible] of [illegible] compounds", Moscow, 1959, 10 pp (Inst of Organoelement Compounds of the Acad Sci USSR), 100 copies (KL, No 14, 1959, 111)

~~5(2,3)~~ 5. 3830

66484

[illegible]

AUTHORS: Glushkova, [illegible], [illegible], Corresponding Member, AS USSR

TITLE: Metallization of [illegible]

PERIODICAL: [illegible]

ABSTRACT: The introduction of [illegible] (so-called "metallization"), may play a certain role in the investigation of the structure of [illegible], as well as in the change of their properties. In the present paper the authors [illegible] and thallium. [illegible] of polymers is difficult. [illegible] In solutions they can be [illegible] by only a few solvents, which cannot be easily [illegible] otherwise [illegible] carried out of: 1) The introduction of [illegible] into poly-[illegible]-vinylthiophene in benzene; 2) [illegible] in benzene; [illegible] compound [illegible] nitrobenzene [illegible]. Mercury [illegible] was used as the [illegible] in [illegible]ization.

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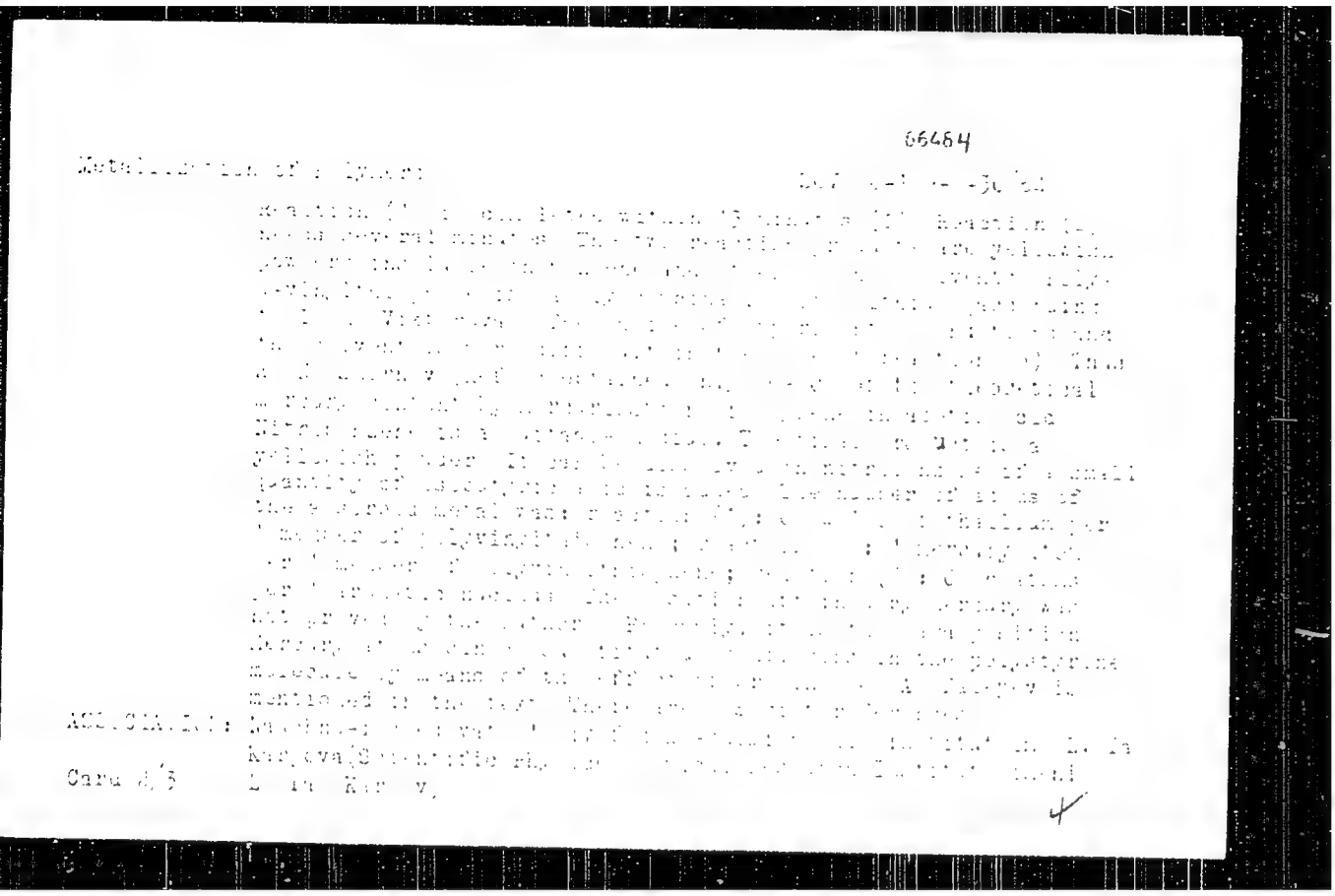
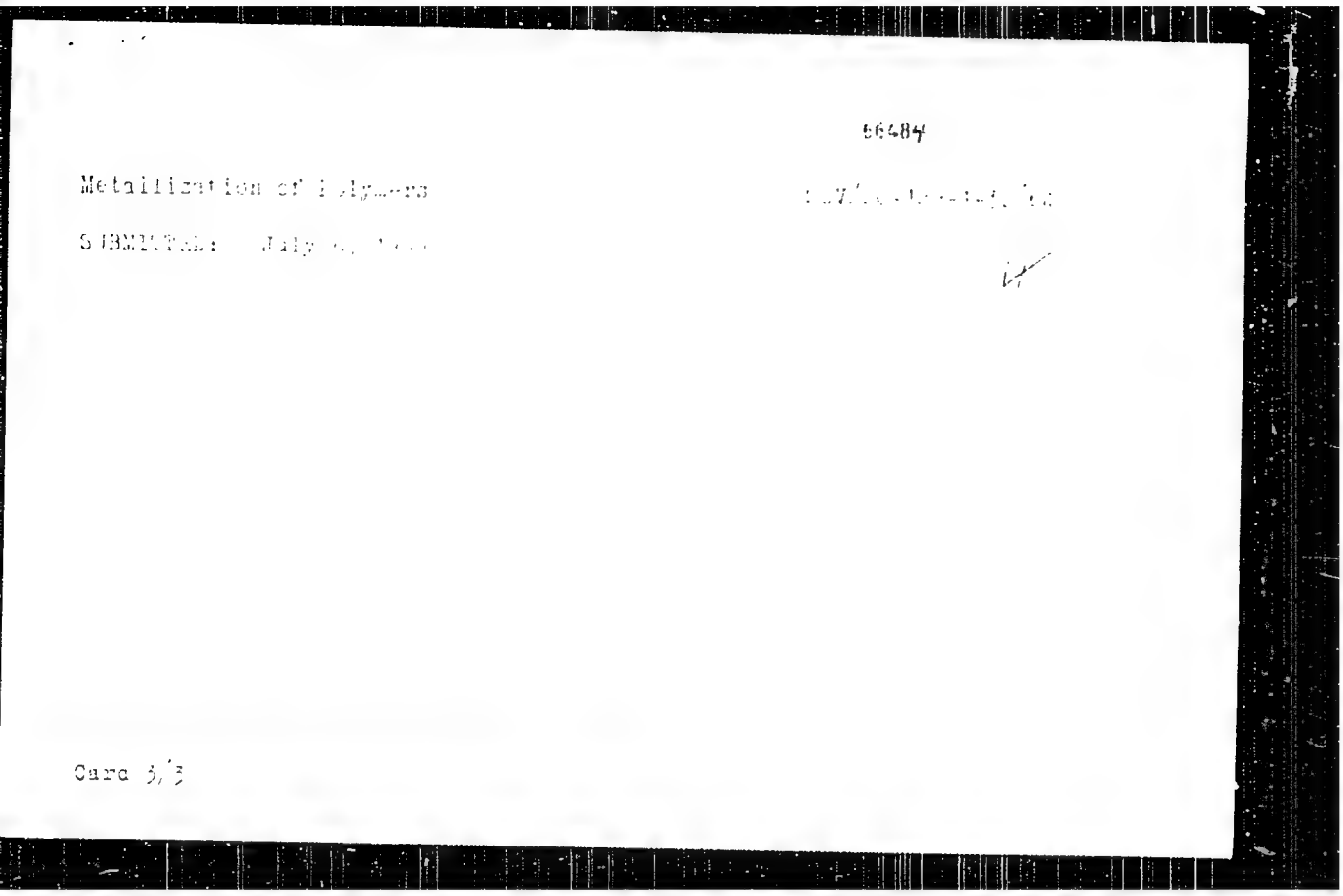
4





56484

Metallization of Polymers

SUBMITTED: July [illegible]

Card 3/3

ZVONKOVA, Z.V.; ASTAKHOVA, L.I.; GLUSHKOVA, V.P.

Atomic structure of tetramethylthiourea. Kristallografiia 5 no.4: 547-552 Jl-Ag '60. (MIRA 13:9)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Urea)

GLUSHKOVA, V P

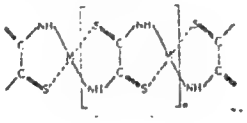
S/020/62/143/005/013/018
B101/B110

AUTHORS: Vozzhennikov, V. M., Zvonkova, Z. V., Rukhadze, Ye. G., Zhilov, G. S., and Glushkova, V. P.

TITLE: Electrical conductivity and activation energy of nono dithio oxamide-, N-substituted dithiocarbamate-, and thiocyanate (Cu, Co, Ni) polymers

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 5, 1962, 1131-1134

TEXT: The electrical conductivity, σ, and the activation energy, E, of the following polychelates were studied:

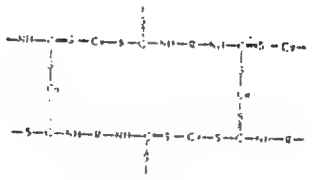


(I),

Card 1/2

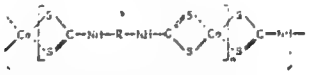
Electrical conductivity and ...

M = Cu, Ni, or Co;



(II),

E = p-C_6H_4-; p,p-$(C_6H_4)_2$-; $(CH_2)_6$; and



(III),

R = p-C_6H_4-; p,p-$(C_6H_4)_2$-; $(CH_2)_6$; $(CH_2)_2$. The following was found:

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S/020/62/143/005/013/018
B101/B110

Electrical conductivity and ...

Polymer	M, R	T, °K	$\sigma_{290°K}$ $ohm^{-1} \cdot cm^{-1}$	σ_o $ohm^{-1} \cdot cm^{-1}$	E, ev
I	Cu	290-350	$4 \cdot 10^{-6}$	$1 \cdot 10^{4}$	0.6
"	Ni	290-500	$2 \cdot 10^{-11}$	$7 \cdot 10^{-1}$	0.6
"	Co	400-500	$7 \cdot 10^{-16}$ *	$1 \cdot 10^{-3}$	0.7
II	p-C_6H_4-	290-425	$7 \cdot 10^{-11}$	1	0.42; 0.62 **
"	p,p-$(C_6H_4)_2$-	290-450	$5 \cdot 10^{-13}$	$1 \cdot 10^{-3}$	0.36; 0.60 **
"	$(CH_2)_6$	310-360	$1 \cdot 10^{-13}$	$2 \cdot 10^{-1}$	0.72
III	p-C_6H_4-	370-460	$9 \cdot 10^{-12}$	$1 \cdot 10^{-3}$	0.56
"	p,p-$(C_6H_4)_2$-	380-460	$3.5 \cdot 10^{-12}$ ***	$3 \cdot 10^{-3}$	0.62
"	$(CH_2)_6$	400-460	$1.7 \cdot 10^{-12}$ ***	$5 \cdot 10^{-3}$	0.76
"	$(CH_2)_2$	400-460	$8 \cdot 10^{-13}$	$1 \cdot 10^{-3}$	0.74

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S/020/62/143/005/013/018
B101/B110

Electrical conductivity and ...

* extrapolated; ** first figure at $T < 360^{\circ}K$, second figure at $T > 360^{\circ}K$; *** $\sigma_{400^{\circ}K}$. In the compounds II and III the higher σ and the lower E of the phenylene derivatives are explained by the effect of the π bonds which is reduced in the diphenylene group owing to the angle between the ring planes. $\log\sigma$ is a linear function of $1/T$, the straight line has, however, a salient point at $360^{\circ}K$ for compounds II. The susceptibility of compounds III is 3.5 μB. Compounds with the bridge groups S=CuN- have semiconductor properties. Also CuSCN showed a salient point in the curve $\log\sigma$ versus $1/T$: at the beginning, E_1 = 0.4 ev, after a 2-hr heating at 400°C, E_2 = 0.1 ev. There are 4 figures and 1 table. The most important English-language reference is: R. M. Hurd, C. De La Mater et al., J. Am. Chem. Soc., 17, 4454 (1960).

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

Card 4/5

L 29933-65 EPF(c)/EPA(s)-2/EWP(j)/EWT(m)/EWP(b)/EWP(t) Pc-4/Pr-4/Pt-10/
Pad IJP(c)/RPL RM/JD/HW
ACCESSION NR: AP5004602 S/0020/65/160/002/0405/0408

AUTHOR: Terent'yev, A.P. (Corresponding member AN SSSR); Vozzhennikov, V. M.; Kolninov, O. V.; Zvonkovz, Z. V.; Rukhadze, Ye. G.; Glushkova, V. P.; Berezkin, V. V.

TITLE: Semiconducting and optical properties of copper, nickel, zinc, and cadmium dithiocarbamates

SOURCE: AN SSSR. Doklady, v. 160, no. 2, 1965, 405-408

TOPIC TAGS: copper dithiocarbamate, nickel dithiocarbamate, zinc dithiocarbamate, cadmium dithiocarbamate, dithiocarbamate semiconducting property, dithiocarbamate optical property, organic semiconductor, chelate electrical property, polychelate conductivity, activation energy

ABSTRACT: This paper is part of a study of a series of chelates and polychelates aimed at determining the dependence of their electrical properties on their atomic structure and nature of their chemical bonds: this in turn is vital in the synthesis of organic semiconductors. In this work, it was found that the electrical conductivity depends on the concentration of the metal in the sample more than on the nature of the metal, as indicated by the highly conductive copper compounds. All the chelates and polychelates studied were substances with high electrical resistance. On the basis of their absorption spectra,

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L 29933-65
ACCESSION NR: AP5004602

several types of electronic transitions were established, and the thermal activation energy E_{therm} was compared with the optical activation energy E_{opt}. It was concluded that the semiconducting parameters are determined primarily by the nature of the metal - ligand chemical bond, and not by the crystal structure or superstructure. Orig. art. has: 3 figures, 1 table and 2 formulas.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical institute); Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow state university)

SUBMITTED: 04Aug64 ENCL: 00 SUB CODE: GC, EM

NO REF SOV: 004 OTHER: 000

Card 2/2

ACC NR: AP7005108 SOURCE CODE: UR/0079/66/036/009/1690/1693

GLUSHKOVA, V. P., KOCHESHKOV, K. A.

"Salts of the Organic Acids of Trivalent Thallium"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 9, 66, pp 1690-1693

Abstract: These salts are used as starting substances for the synthesis of organothallium compounds or in exchange reactions with organomercuric compounds. The authors synthesized for the first time the following organic acid salts of trivalent thallium: thallium triisobutyrate, thallium tripropionate, thallium tri-n.caprylate, and thallium tribenzoate. The first two compounds were obtained by dissolving thallium trioxide Tl_2O_3 in boiling isobutyric and propionic acids respectively, while thallium tri-n.caprylate and tribenzoate were obtained by reacetylation. All of these salts hydrolyze in air but are quite stable when stored over phosphorus pentoxide. Their melting points are fairly high (119-179.5°C) but they are lower than the melting points of the corresponding organic acid salts of monovalent thallium. When treated with hydrazine hydrate, the salts of trivalent thallium are reduced to salts of monovalent thallium of the corresponding acid. [JPRS: 38,970]

ORG: none

TOPIC TAGS: thallium compound, organometallic compound, organomercury compound

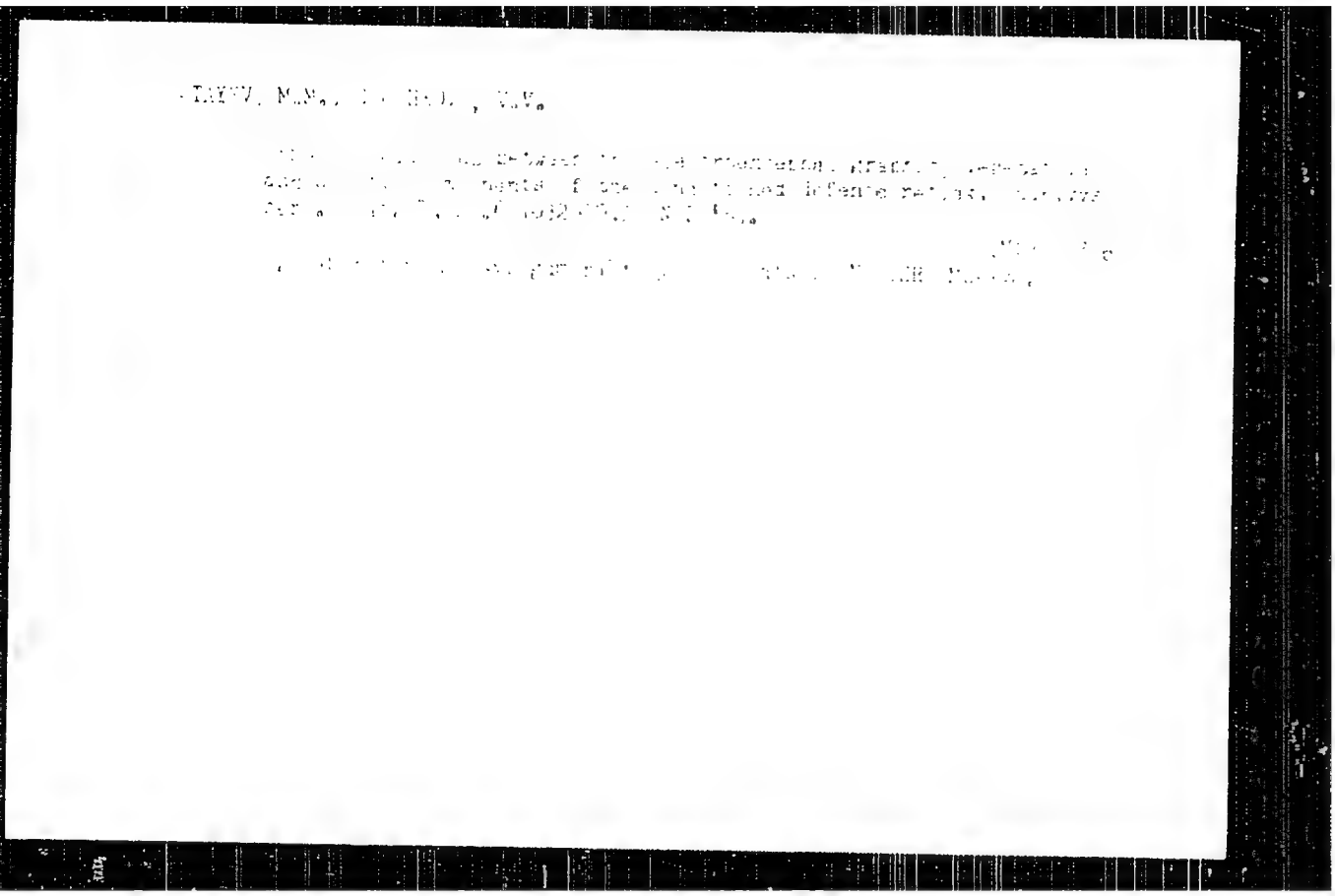
SUB CODE: 07 / SUBM DATE: 01Jul65 / ORIG REF: 002 / OTH REF: 002

Card 1/1 UDC: 546.683 + 547.13

FOSTOL, G.S.; CHERNYKH, Ye.F.; KHAVTSOVA, K.K.; GLUSHKOVA, V.S.

Dynamics of rheumatic fever incidence in children in Khabarovsk Territory according to hospital data for five years. Vop.okh. mat., i det. 7 no.12:79 D'62. (MIRA 16:7)

1. Iz kliniki detskikh bolezney Khabarovskogo meditsinskogo instituta i Khabarovskogo krayevogo otdela zdravookhraneniya.
(CHILDREN--DISEASES) (GENECOLOGY)



GLUSHKOVA, Ye.K., nauchnyy sotrudnik

Conditioning of young children to cold by baths. Gig. i san. 21 no.11:28-36 N '56. (MLRA 10:2)

1. Iz otdela gigiyeny Nauchno-issledovatel'skogo pediatricheskogo instituta. Gig. i san.21 no.11:28-36 N '56. (MLRA 10:2)

(TEMPERATURE
conditioning of young child. to cold temperature)

GLUSHKOVA, Ye. K., Candidate Med Sci (diss) -- "The hygienic characteristics of positive films of children and conditions for their use". Moscow, 1959. 12 pp (Acad Pedagogical Sci RSFSR, Sci Res Inst of Physical Training and School Hygiene), 150 copies (KL, No 24, 1959, 149)

GLUSHKOVA, Ye.K.

Children's filtrips and their demonstration from the hygienic point of view. Gig.i san. 25 no.1:41-46 Ja '60. (MIRA 13:5)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta sanitarii i gigiyeny imeni F.F. Erismana Ministerstva zdravookhraneniya RSFSR.
(AUDIO-VISUAL AIDS)

GLUSHKOVA, Ye.K.

Some hygienic problems in television viewing of children. Gig. i san. no. 10:22-27 O '60. (MIRA 13:12)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta sanitarii i gigiyeny imeni F.F. Erismana Ministerstva zdravookhraneniya RSFSR.
(TELEVISION--HYGIENIC ASPECTS)

GLUSHKOVA, Ye.K.

Some hygienic problems of planning classrooms and the arrangement of furniture. Nauch. inform. Otd. nauch. med. inform. AMN SSSR no.1:52-53 '61 (MIRA 16:11)

1. Institut gigiyeny detey i podrostkov (ispolnyayushchiy obyazannosti direktora - prof. S.M. Grombakh) AMN SSSR, Moskva.

*

BELOSTOTSKAYA, Ye.N.; GLUSHKOVA, Ye.K.; GNCHBAKH, S.N.; SUKHAREV, A.G.; TEDESHEV, V.A.; TIMOKHINA, Ye.A.; PAVLOPOPOVA, V.A.

Hygienic problems in the organization of work of students in agriculture. Gig. i san. 26 no.6:52-57 Je '61. (MIRA 15:5)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta gigiyeny imeni F.F.Erismana Ministerstva zdravookhraneniya RSFSR i Stavropol'skoy krayevoy sanitarno-epidemiologicheskoy stantsii.
(CHILDREN IN AGRICULTURE--HYGIENIC ASPECTS)

GLUSHKOVA, Ye.K., mladshiy nauchnyy sotrudnik

"The angle of vision" as a supplementary criterion in planning class rooms and the arrangement of furniture. Gig.i san. 26 no.12:34-38 D '61. (MIRA 15:9)

1. Iz Instituta gigiyeny detey i podrostkov AMN SSSR.
(SCHOOL HYGIENE)

KOZIK, S.M.; KALININ, Yu.D., professor; AFANAS'YEVA, V.I., kandidat fiziko-matematicheskikh nauk; PENKEVICH, M.S., kandidat fiziko-matematicheskikh nauk; GLUSHKOVA, Ye.P.; KUZNETSOVA, Z.S.; BELOUSOVA, M.A.; SOLOVEYCHIK, A.A., tekhnicheskiy redaktor

[Manual on variation in the magnetic field of the U.S.S.R.] Spravochnik po peremennomu magnitnomu poliu SSSR. Pod red. V.I. Afanas'evoi. Leningrad, Gidrometeor.izd-vo, 1954. 265 p. (MLRA 10:7)

1. Leningrad. Nauchno-issledovatel'skiy institut zemnogo magnetizma. 2. Nauchno-issledovatel'skiy institut zemnogo magnetizma (for Kalinin, Afanas'yeva, Belousova) 3. Tashkentskaya nauchno-issledovatel'skaya geofizicheskaya observatoriya (for Kozik). 4. Glavnaya Geofizicheskaya observatoriya (for Penkevich, Glushkova, Kuznetsova) (Magnetism, Terrestrial)

L 44430-66 EWT(1)/FCC GW

ACC NR: AT6023732 SOURCE CODE: UR/2831/65/000/014/0104/0116

AUTHOR: Glushkova, Ye. P.

ORG: none

TITLE: Some peculiarities of magnetoionospheric disturbances in the transitional zone

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. V razdel programmy MGG: Ionosfera. Sbornik statey, no. 14, 1965. Ionosfernyye issledovaniya, 104-116

TOPIC TAGS: magnetic storm, ionosphere disturbance, geomagnetic field, aurora, Van Allen belt

ABSTRACT: The author discussed in detail peculiarities of magnetoionospheric disturbances in the transition zone; the upper limits in the Eastern Hemisphere are near 62 N and in the Western Hemisphere near 42 N, and the lower limits in the Eastern and Western Hemispheres are 55 N and 35 N, respectively and are

Card 1/2

L 44430-66
ACC NR: AT6023732

located near the auroral zone. Observations covered the period extending mainly over the last months of 1958 and most of 1959 because the most complete data on ionospheric observations made with vertical soundings made available to the author covered this period. The article shows that during severe, very strong magnetic storms, D_s-variations of H and Z components of the geomagnetic field occur in synphases. Phenomena characteristic of the auroral-zone disturbances are observed in the ionosphere. Blackouts are observed only in cases during the positive phase of a storm when a sudden peak in the H component, warns of the approach of the current system to the observation point. Moreover, the negative phase of the storm should be well developed. As the transition zone is located approximately in the latitudes where the outer radiation belt is closest to the earth' s surface, it is suggested that there may be connection between certain phenomena observed during magnetoionospheric disturbances and the movement of particles in the outer radiation belt. The author is extremely grateful to the scientific associates of AANII, A. S. Besprozvannoya and A. I. Ol' , for valuable suggestions made in course of this work. Orig. art. has: 6 figures. [GC]

SUB CODE: 08, 04, 20/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 009/

Card 2/2

Glushkova, Ye. P.

37-12-4/12

AUTHOR: Penkevich, M. S., Glushkova, Ye. P., Kuznetsova, Z. S.

TITLE: Some Common Regularities in the Daily Variations of the Earth's Magnetic Field Established by Soviet Polar Observatories (Nekotoryye obshchiye zakonomernosti sutochnykh variatsiy magnitnogo polya zemli po dannym Sovetskikh polyarnykh observatoriy)

PERIODICAL: Trudy Nauchno-issledovatel'skogo instituta zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln, 1957, Nr 12 (22), pp. 73-85 (USSR)

ABSTRACT: To analyze a very complicated pattern of magnetic variations in polar regions, long-range observations were studied in regard to declination (D), horizontal component (H), vertical component (Z), and the variations of total force (δF). The study covered both quiet and disturbed days, grouped into clusters of summer, winter and equinoctial observations. For quiet days the pattern of variations was steady, with only the amplitudes varying. This steady

Card 1/3

Some Common Regularities in the Daily Variations (Con't) 37-12-4/12

pattern was, as a rule, sustained even on disturbed days, but some phenomena differed from those observed on quiet days, e.g., it was found that on the days of minimum magnetic activity (quiet days), a twin wave appeared which was not seen on days of maximum magnetic activity. The article examines the relationship between magnetic amplitudes and solar and magnetic activities, as observed in moderate latitudes. This relationship is reduced to the following formula: $A = A_0 + \beta W$, in which A is the amplitude of magnetic vibrations and W the index of solar activity (equal to the relative number of sun spots). It was found that W, characterizing mainly the short wave (ultraviolet radiation), has no bearing on corpuscular radiation. The best tool for evaluating objectively magnetic amplitudes on disturbed days is the so-called K index, which is calculated from 3-hour intervals (universal time). It was established that the amplitudes of magnetic values grow with latitude, but start to decrease at a certain distance from the pole. In high latitudes, the shape of the distributive curve was found to be of the parabolic type with the apex lying close to 70° latitude. This dependence on latitude is analyzed for quiet and disturbed days, and for the indices concerned

Card 2/3

3/169/62/000/007/140/148
A000/A101

AUTHOR: [illegible], Ye. P.

TITLE: Preliminary results of investigating magneto-ionospheric disturbances at Voyeykovo

PERIODICAL: Referativnyy zhurnal, geofizika, no. 7, 1962, 8, abstract 7G166 (V sb. Ionosfern. issledovaniya, no. 6, M., AN SSSR, 1961, 46-51)

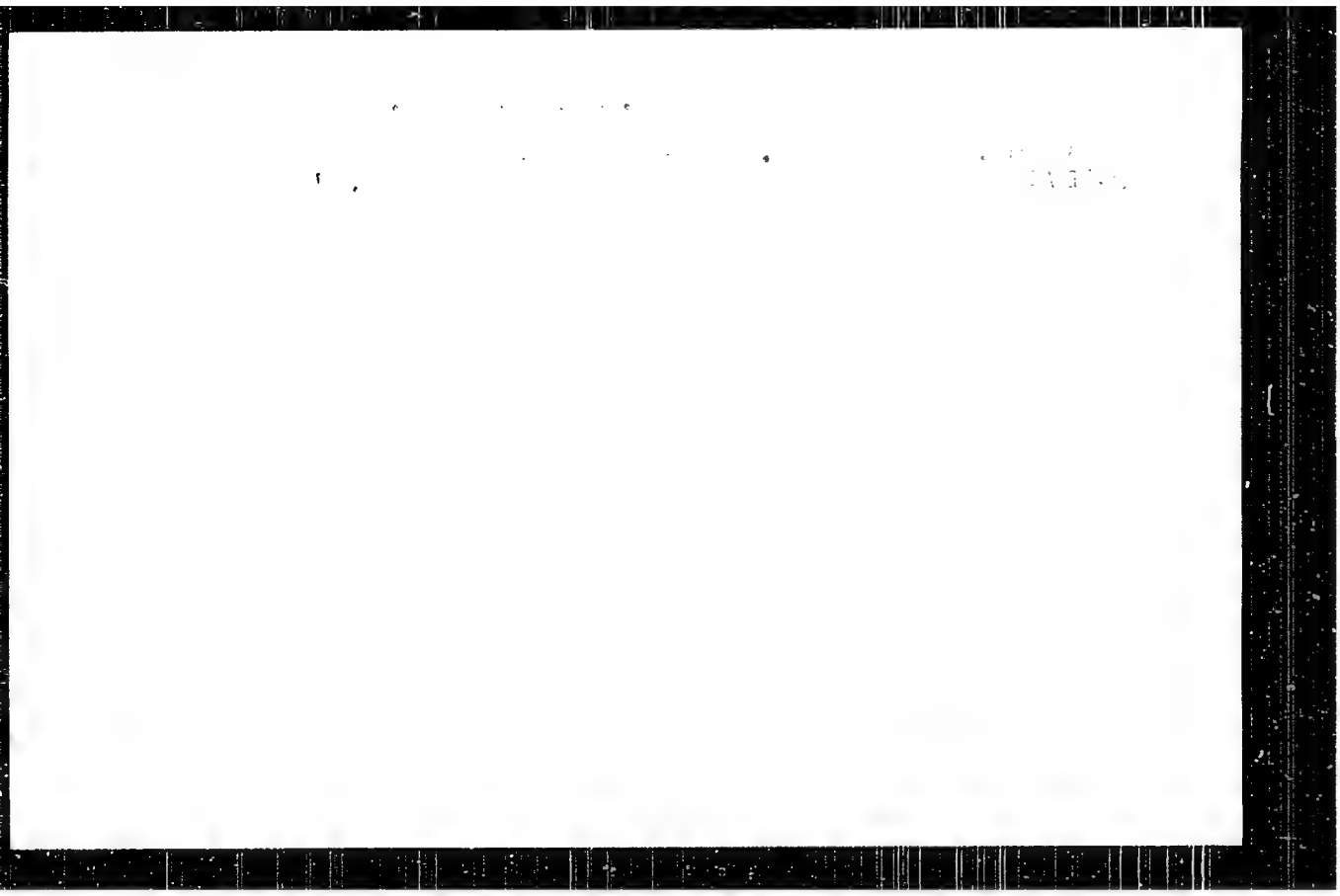
TEXT: The data of the Voyeykovo magneto-ionospheric observatory (near Leningrad) for the period August 1958 - December 1959 were used to study the relation of different E_s types to the magnetic activity. Mid-latitudinal E_s types are, on the whole, observed on quiet days. The polar r and C types appear during large and very large magnetic storms. [Abstracter's note: Complete translation.]

Card 1/1

GLUSHKOVSKIY, A.Ye.

Malignization of one of the foci of multiple chondromatosis. Vest. rent. i rad. 39 no.4:72-73 Jl-Ag '64. (MIRA 18:7)

1. Gorodskaya bol'nitsa imeni Semashko, gorod Smela Cherkasskoy oblasti.



L 8376-65 EPR Ps-4 SSD/AFWL/ESD(gs)/RAEM(t) WW

ACCESSION NR: AR4044028 S/0058/64/000/011/A031/A031

SOURCE: Ref. zh. Fizika, Abs. 11A308

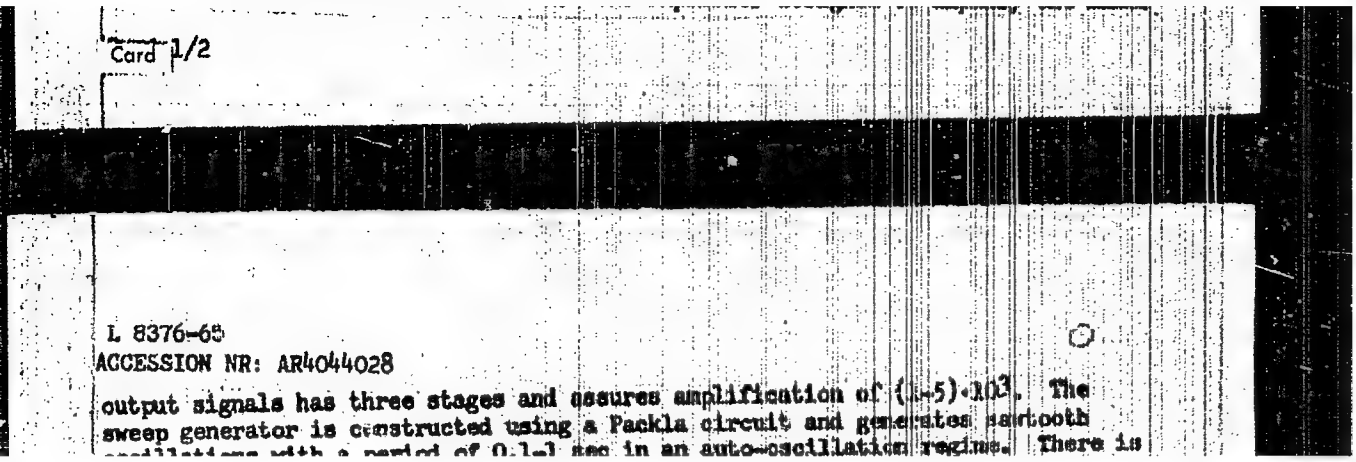
AUTHOR: Glushkovskiy, M. Ye.

TITLE: SSO-1 stroboscopic oscillograph

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike, 1961. M., Gosatomizdat, 1962, 53-65

TOPIC TAGS: oscillograph, stroboscopic oscillograph/SSO-1 stroboscopic oscillograph

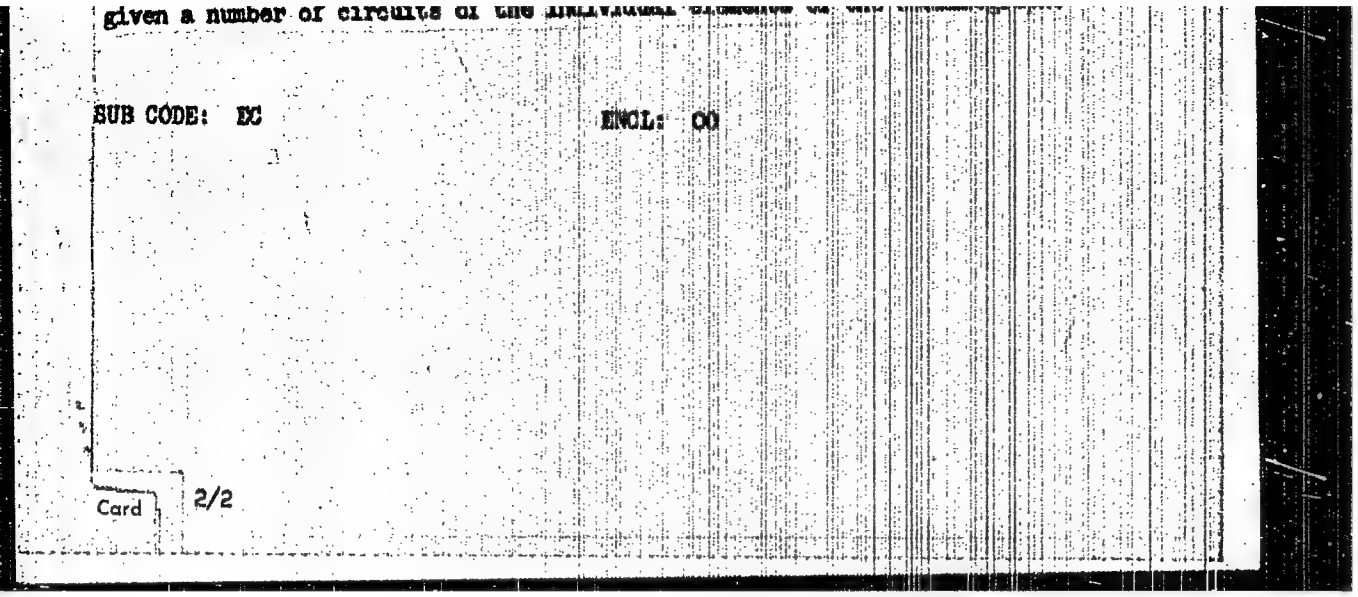
TRANSLATION: For oscillography of periodic processes of nanosecond duration there is used more and more the stroboscopic method, in which a broad transmission band is combined with high sensitivity. On the screen of the stroboscopic oscillograph there



Card 1/2

L 8376-65
ACCESSION NR: AR4044028

output signals has three stages and assures amplification of (1-5)·10³. The sweep generator is constructed using a Packla circuit and generates sawtooth oscillations with a period of 0.1-1 sec in an auto-oscillation regime. There is



given a number of circuits of the [illegible]

SUB CODE: EC ENCL: 00

Card 2/2

PLOTNIKOVA, M.I.; KARDOPOL'TSEVA, O.I.; SALTYKOV, O.G.; UMANETS, V.N.; GLUSHKOVSKIY, I.B.

Stratigraphy and lithology of "interstream pebble beds" in the Markha-Tyung interfluve and paleography of the time of their accumulation in connection with the formation of diamond-bearing placer deposits in the middle Markha Basin. Trudy IAFAN AN SSSR Ser. geol. no.9:133-141 '63. (MIRA 16:12)

GLUSHKOVSKIY, M.Ye.

Stroboscopic oscilliograph for monitoring nanosecond pulse signals. Izv. vys. ucheb. zav.; radiotekh. 6 no.1:3-14 Ja-F '63. (MIRA 16:3)

1. Rekomendovana kafedroy radioperedayushchikh ustroystv Kiyevskogo ordena Lenina politekhnicheskogo instituta.
(Cathode ray oscilligraph) (Pulse techniques (Electronics))

GLUSHKOVSKIY, M.Ye.

Stroboscopic oscillograph with recording on an EPP-09MI potentiometer. Prib. i tekh. eksp. 8 no.5:114-118 S-O '63.
(MIRA 16:12)

L 40724-65

ACCESSION NR: AP5012179 UR/0066/64/000/005/0022/0024

AUTHOR: Glushnev, M. P. (Engineer)

TITLE: Cold-storage plants in permafrost regions

SOURCE: Kholodil'naya tekhnika, no. 5, 1964, 22-24

TOPIC TAGS: refrigeration engineering, structural engineering

ABSTRACT: The article is a brief description of cold-storage plants in use in Soviet permafrost areas, the Chukotsk region being taken as typi-

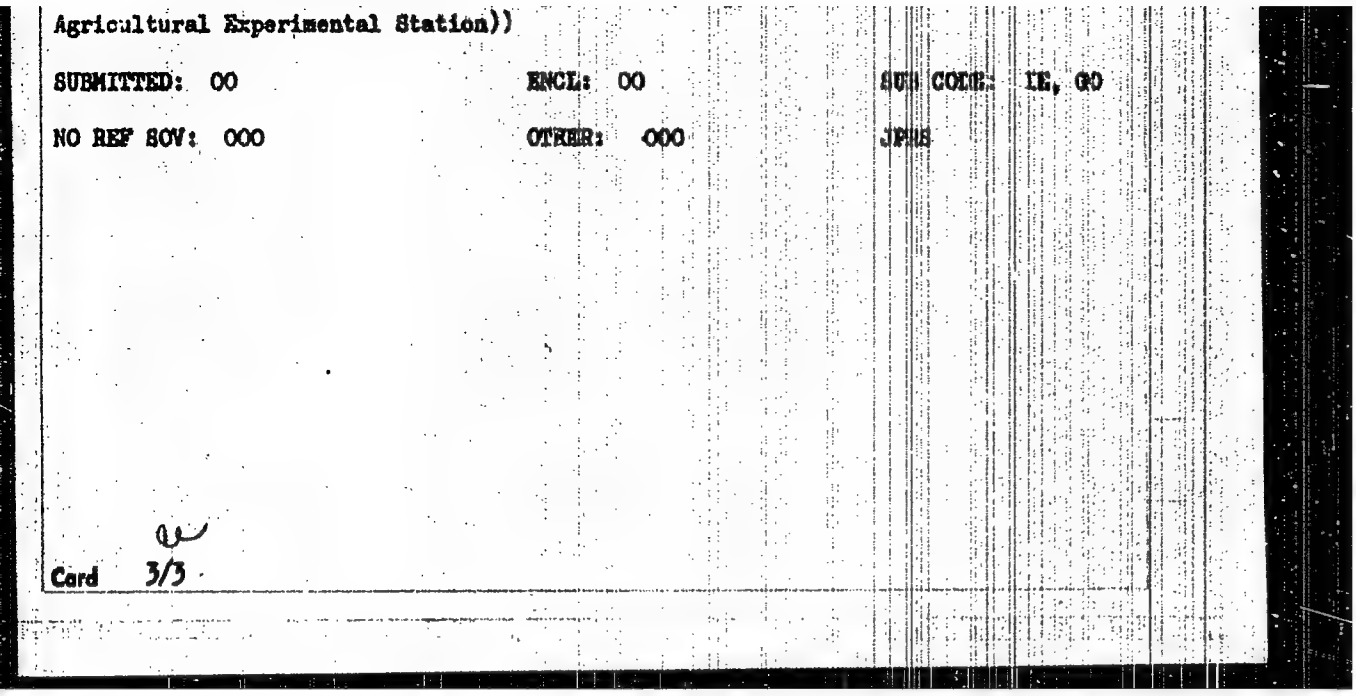
Card 1/3

L 40724-65
ACCESSION NR: AP5012179

They may be single- or multi-level, simple (for storing one food) or complex (for several foods). A permafrost cold-storage plant includes four [illegible] elements: an entrance shaft, tunnel and storage chamber(s). The

Orig. art. has: 2 figures.

Card 2/3



Agricultural Experimental Station))

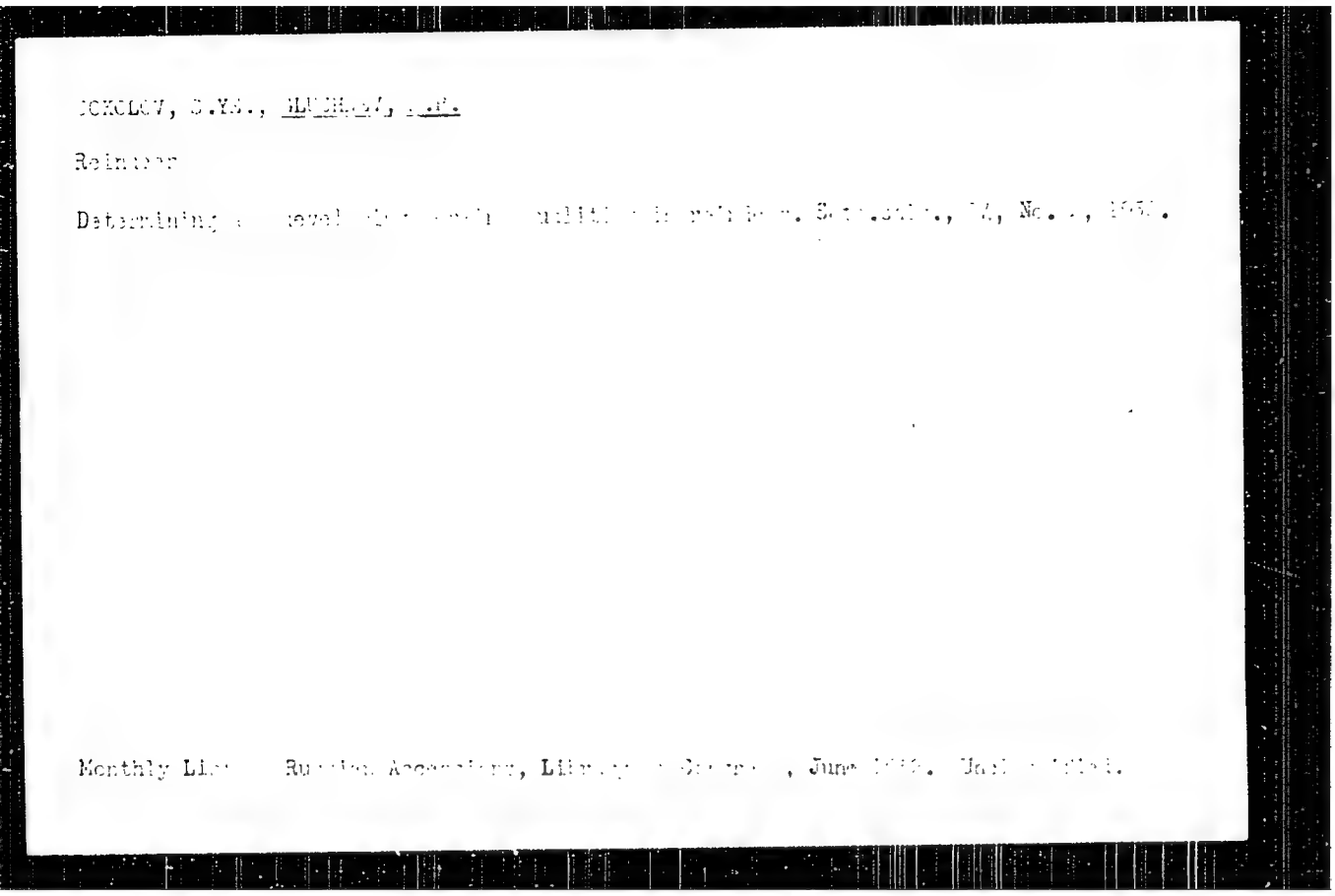
SUBMITTED: 00 ENCL: 00 SUB CODE: IE, GO

NO REF SOV: 000 OTHER: 000 JPRS

Card 3/3

GLUSHNEV, M. P., Chief Vet.
Department of Agriculture, Evenkii national okrug
"Treatment of hoofs of reindeers."
SO: Veterinariya 27(11), 1950, p. 46 cased

GLUSHNEV, M.P., Vet.
Evenkiiskii National Okrug.
"Shady barns as a measure for prevention of necrobacillosis of reindeer."
SO: Vet. 28 (5) 1951, p. 47 cased

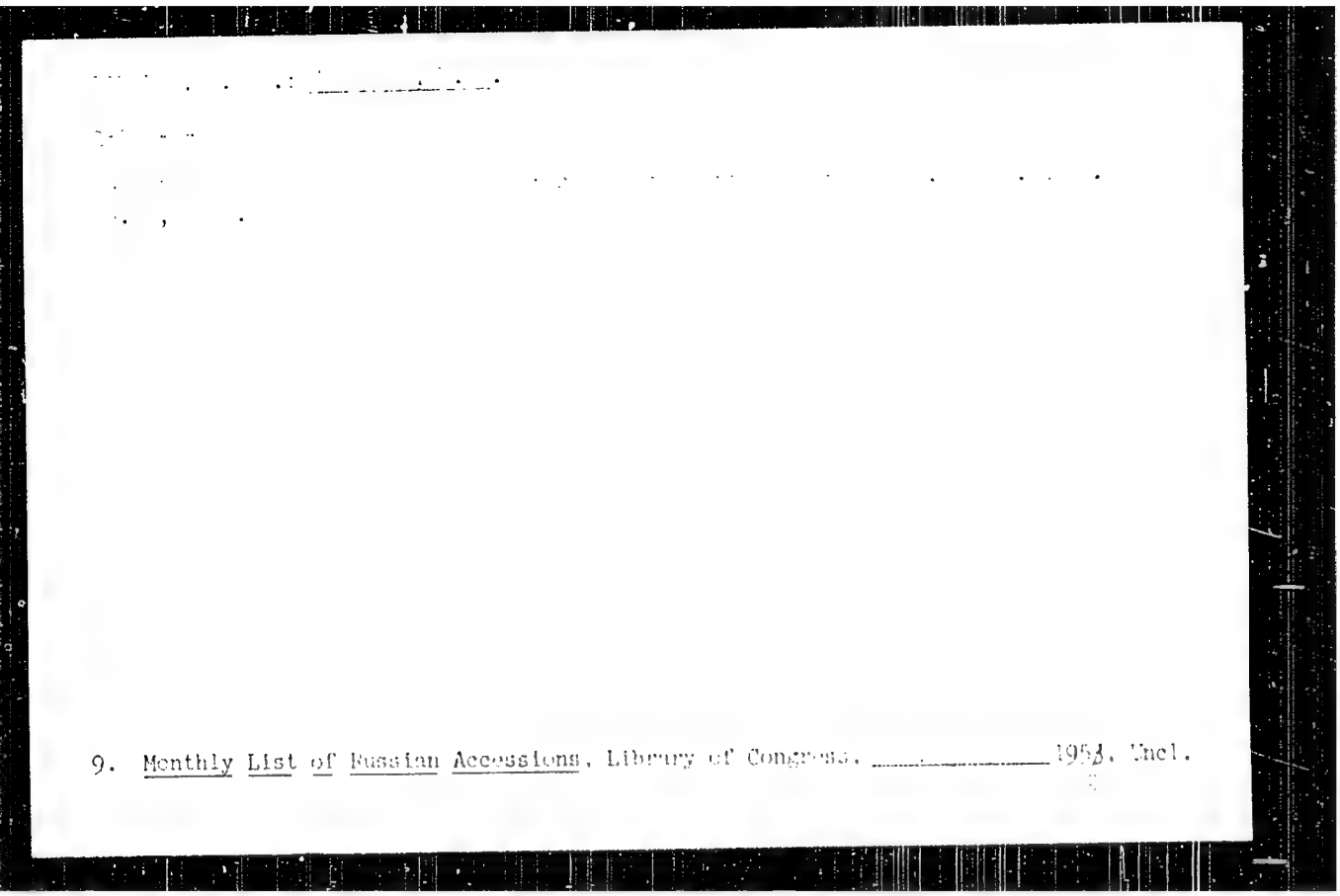


[illegible], S.Ya., [illegible]

Reindeer

Determining [illegible]

Monthly List [illegible]



9. Monthly List of Russian Accessions, Library of Congress. _____ 1953. Uncl.

GLUSHNEV, M.P., veterinarnyy vrach.

Gas chamber for reindeer. Veterinariia 30 no.11:50 N '53.
(MLRA 6:11)

1. Turinskaya vetbaklaboratoriya, Krasnoyarskogo kraya.

GLUSHNEV, M. P.

"Improvements and New Methods in the Fight Against Itchy Scab in Northern Deer." Cand Vet Sci, Leningrad Veterinary Inst, Min Higher Education, Leningrad, 1954. (KL, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

USSR/Diseases of Farm Animals. Arachno-Entomoses. R

Abs Jour: Ref Zhur-Biol., No 15, 1958, 69510.

Author : Glushnev, M. P.
Inst : Far Eastern Scientific Research Institute of Agriculture.
Title : Experience in Combatting the Mange of Reindeer on the Chukotka Peninsula.

Orig Pub: Byul. nauchno-tekhn. inform. Dal'nevost. n.-i. in-ta s. kh., 1957, No 4, 38-41.

Abstract: For the treatment and prophylaxis of mange in reindeer, hexachlorocyclohexane-creolin emulsion was used by way of spraying of animals or dipping them in portable or stationary tubs. When dipping was resorted to, cases of poisoning of fawns by hexachlorocyclohexane occurred as a result of the stratification of the

Card : 1/2

BUNIN, G., inzh.; [illegible], S., inzh.

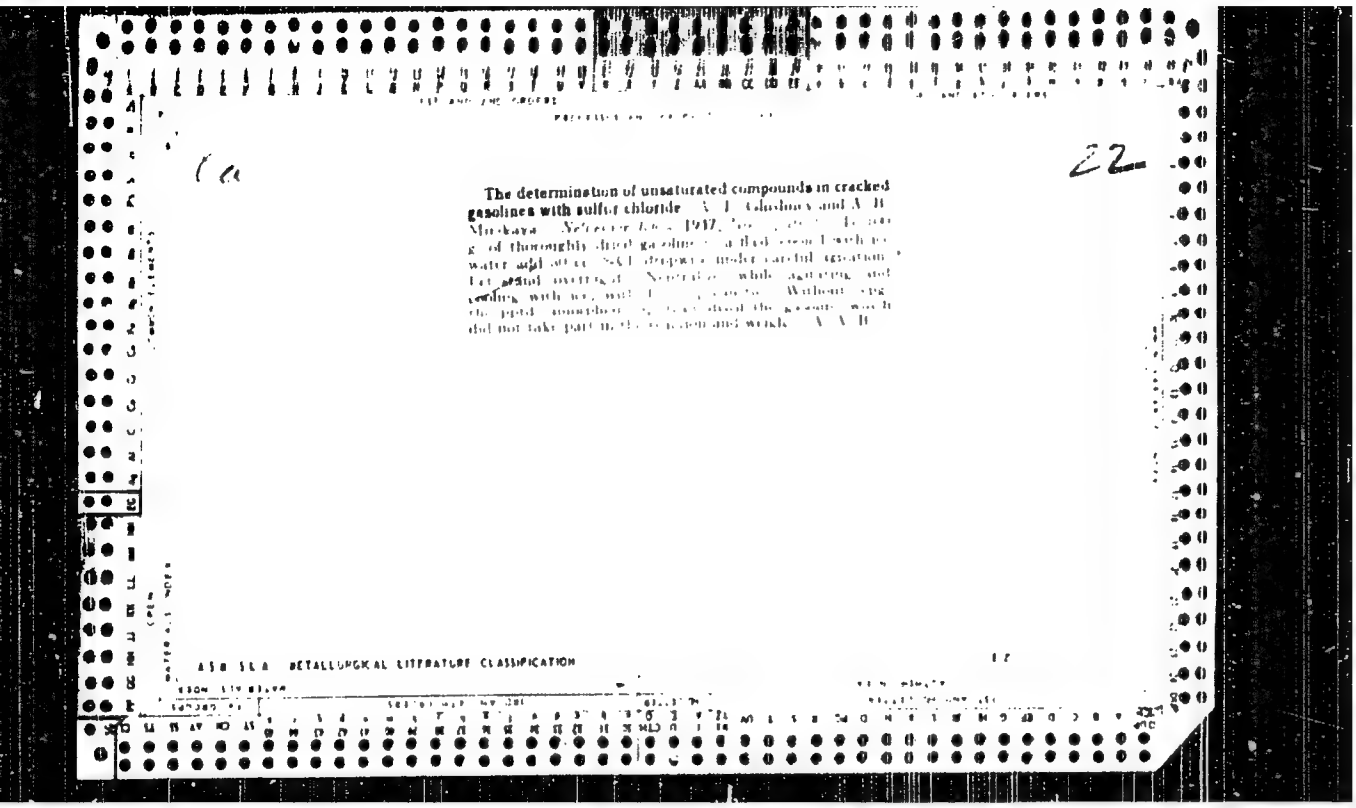
Atom, magnet, and suspension are the tools of coal preparation.
Ugol'. 26 no.8:29-31 Ag '51. (MLRA 14:12)
(Coal preparation)

REMESNIKOV, I., kand.tekhn.nauk; GLUSHNEV, S., inzh.

Magnetic screen for coal preparation. Tekh.mol. 30 no.10:4 '62. (MIRA 15:12)
(Coal preparation plants--Equipment and supplies)
(Magnetic separation of ores)

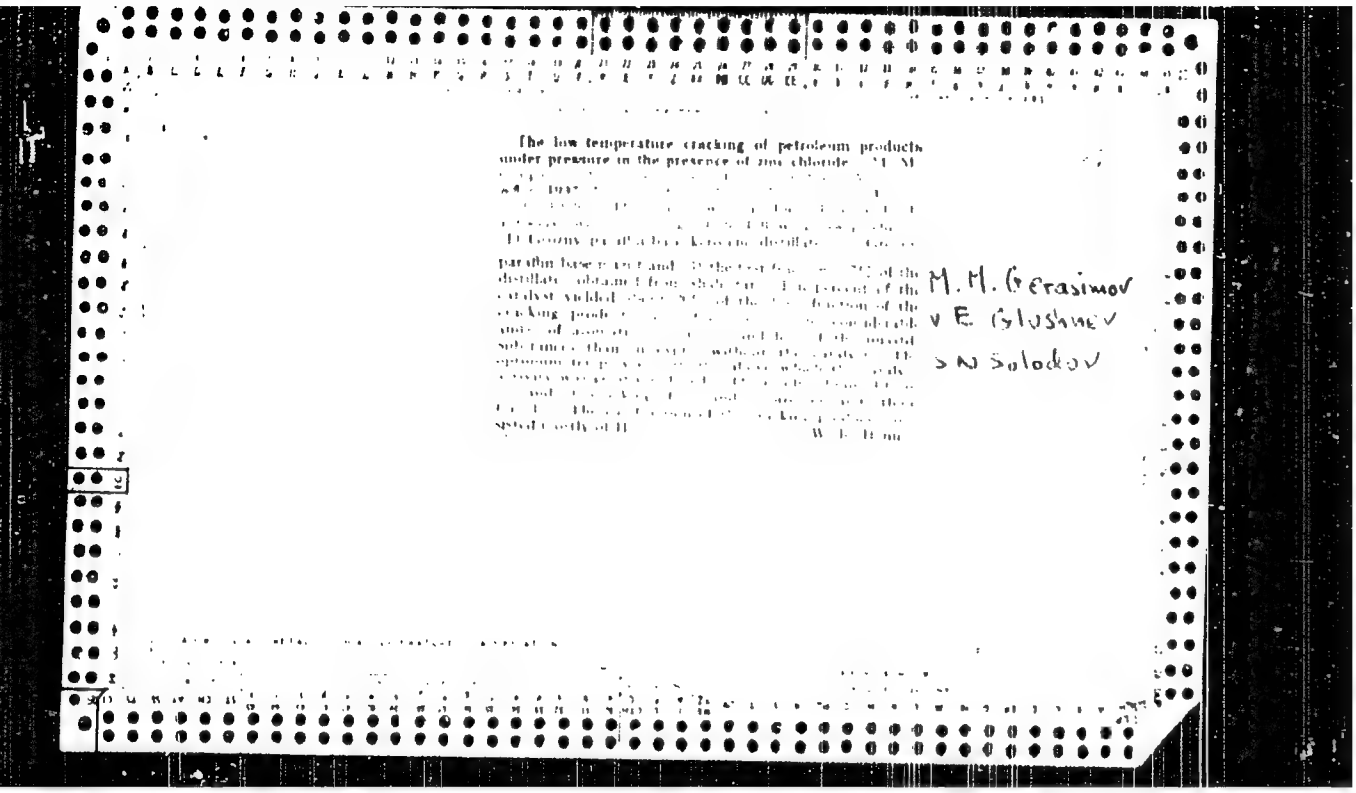
GLUSHNEV, S.V.; DEMIDOV L.G.; SPERANSK[illegible], G.V.

Centrifugal preparation of petrographically heterogeneous Kuznetsk Basin coals. Trudy IGI 20:3-9 '63. (MIRA 17:8)



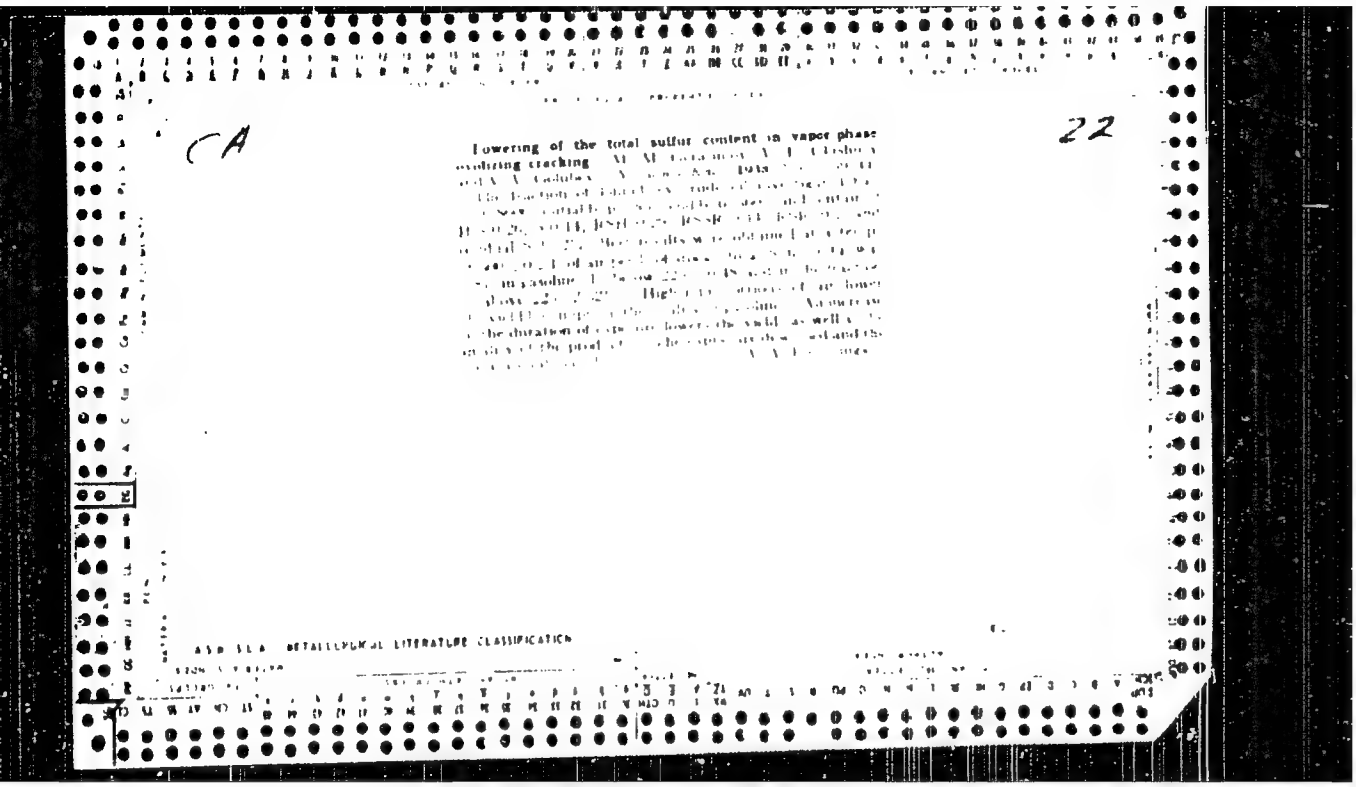
The determination of unsaturated compounds in cracked gasolines with sulfur chloride

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION



The low temperature cracking of petroleum products under pressure in the presence of zinc chloride

M. M. Gerasimov
V. E. Glushnev
N. N. Solodov



CA

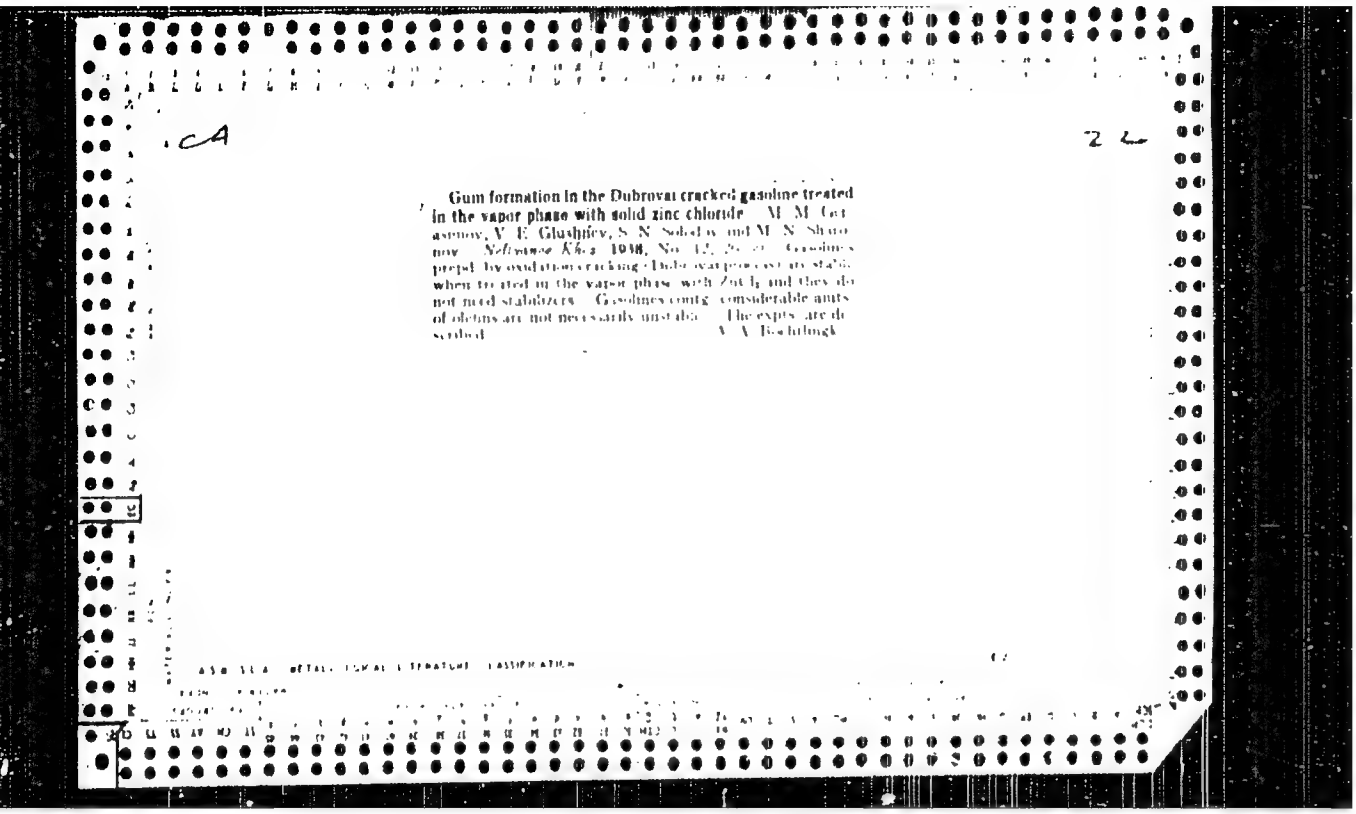
22

Lowering of the total sulfur content in vapor phase oxidizing cracking

ASD SLA METALLURGICAL LITERATURE CLASSIFICATION

Vapor phase refining of cracked gasoline (Dubrovai method) with solid zinc chloride on pumice stone. A. I.
Glushnev, S. S. Sobolev and M. N. Sharonov. Neft.
Khoz. 1938, No. 6, 31-5. The samples preliminarily
treated with 5 Bé. NaOH, passed through the ZnCl
unit in the vapor phase, yielded a gasoline with a higher
induction period and lower acidity (the latter being neu-
tralized by washing with water), a lower initial content
actual gums and a greater yield of low boiling fractio
than gasoline which was not treated with NaOH. The
stability of the gasolines is higher than of those which were
not treated with $ZnCl_2$, even in the absence of inhibitor.
These gasolines have an increased content of light frac-
tions, and this phenomenon is being further investigated.
It is intended to replace pumice stone with a cheaper
carrier. Catalyst consumption 0.3%. Alpha naphthol
and wood tar inhibitors also were used. The expts. are
described in detail. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Gum formation in the Dubrovai cracked gasoline treated in the vapor phase with solid zinc chloride. M. M. Gerasimov, V. F. Glushkiev, S. N. Sokolov and M. N. Sharonov. *Neftyanoe Khoz.* 1938, No. 12, 76-81. Gasolines prepd. by oxidation-cracking Dubrovai petroleum at 450° when treated in the vapor phase with $ZnCl_2$ and then do not need stabilizers. Gasolines contg. considerable amts. of olefins are not necessarily unstable. The expts. are described. A. V. Bachulingk

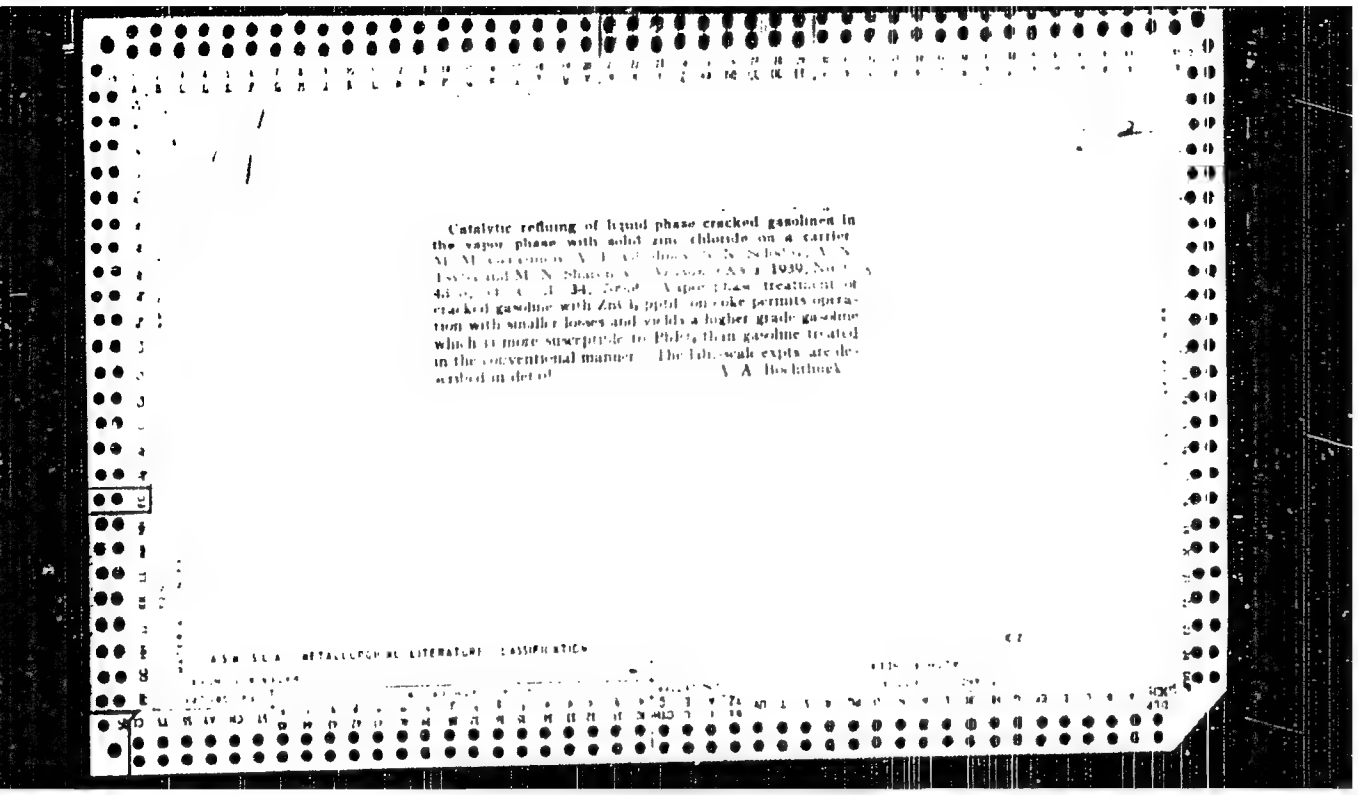
The vapor phase oxidation cracking of petroleum products. I. I. Berents and V. I. Gleshnev. *Bull. acad. sci. U. R. S. S., Classe sci. tech.* **1939**, No. 3, 85-100; *Khim. Referat. Zhur.* **1939**, No. 11, 108-2.—Oxidation cracking of gasoline was studied in an iron lab. app. of 300 cc. capacity and in a large-scale lab. equipment (5000 cc.). An increase of the concn. of O in the mixt. leads to an increase of the velocity of the reaction. The reaction is of the 1st order. Energies of activation were detd. In oxidation cracking a greater transformation of hydrocarbons and a more aromatization are obtained at lower than at higher temps. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

20A *22*

Catalytic refining of the cracking products of petroleum as a means of obtaining high grade motor fuels. M. M. [illegible] V. [illegible] [illegible] 1939, No. [illegible] 1939, No. 4, [illegible] [illegible] gasolines from shale tar were refined in the vapor phase in the presence of $ZnCl_2$ on a pumice or coke [illegible] dried at 300°. Refining with a catalyst [illegible] not less than 10% and at a temp. not less than 213-25° is recommended. An increase of the concn. of the catalyst decreases the formation of tar in refined gasolines. Refining with $ZnCl_2$ causes an increase of the [illegible] The refining of the [illegible] vapor phase [illegible] cracked gasoline [illegible] produced satisfactory results under plant conditions. Good results were also obtained from refining the liquid-phase cracked gasolines from [illegible] tar. A replacement of H_2SO_4 by $ZnCl_2$ in the refining process of the cracked distillates makes it possible to lower the cost of their refining, to increase the yield of light fractions, to lower the tendency for the formation of tar and to increase the octane nos. of the gasolines. W. R. Henn

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



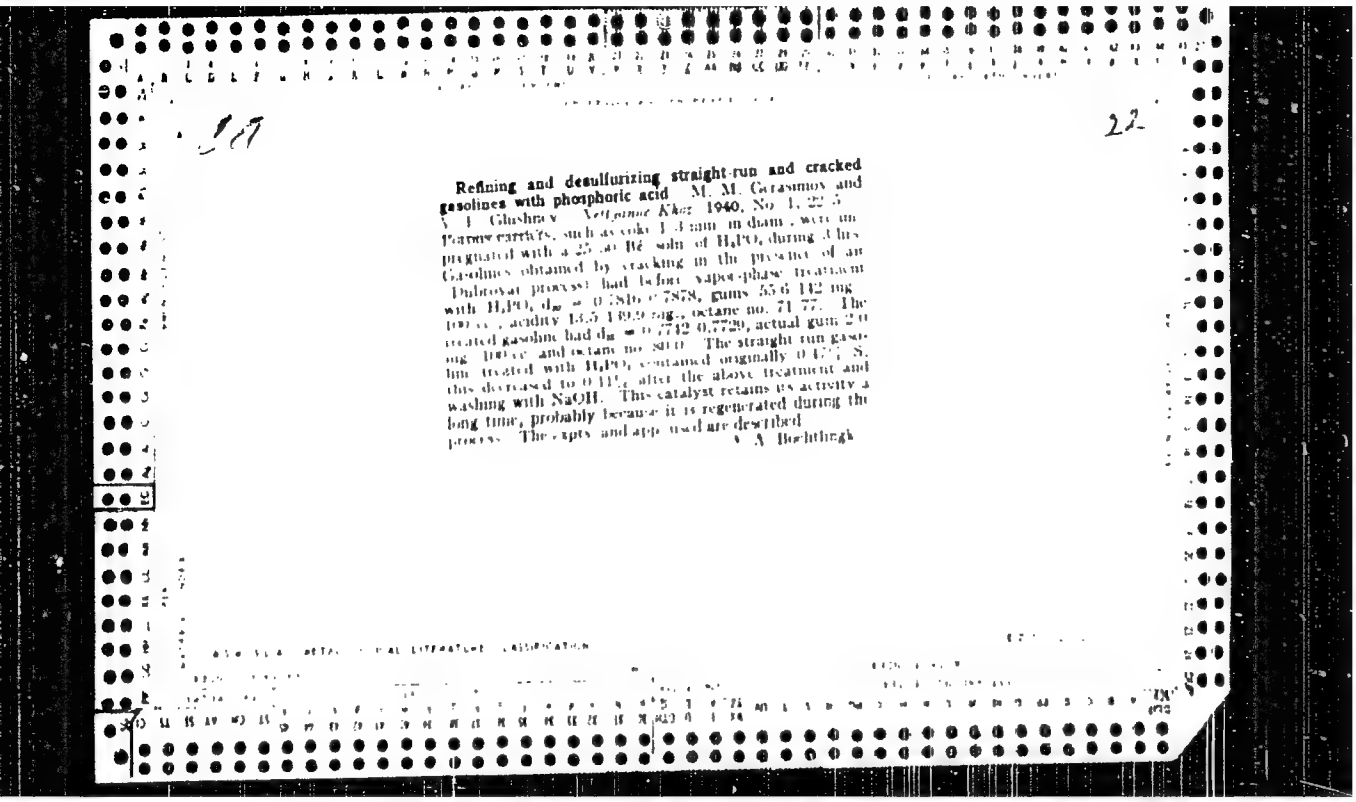
Catalytic refining of liquid phase cracked gasolines in the vapor phase with added zinc chloride on a carrier [illegible] 1939. [illegible] Vapor phase treatment of cracked gasoline with ZnCl2 [illegible] on coke permits operation with smaller losses and yields a higher grade gasoline which is more susceptible to Pb[illegible] than gasoline treated in the conventional manner. The lab.-scale expts. are described in detail.

V. A. Bokshitzky

ASM SLA METALLOGRAPHIC LITERATURE CLASSIFICATION

Catalytic refining of cracked gasoline with zinc chloride. M. M. Gerasimov and V. E. Glushnev. *Novosti Tekh. [illegible]* 1939, No. 11-12, 45-6.—The vapor of crude pressure distillate heated to 220-30° is allowed to pass through a refining column packed with 15 cu. m. of coke, covered with $ZnCl_2$ (20% by wt. of coke) from a $ZnCl_2$ soln. of [illegible] Bé. Unstable unsatd. and tar-like substances are polymerized and are removed from the column. The gasoline vapor is passed through the rectifying column and is washed free of residual acidity with water. The fraction up to [illegible] from the liquid phase pressure distillate and having an octane no. of 74.0, purified with [illegible] of $ZnCl_2$ and with 1.5 H_2SO_4, resp., yielded polymers and sludge [illegible] and 17.8%, and refined gasoline [illegible] and 82.2%, and had octane nos. [illegible] and [illegible]. A. A. F.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



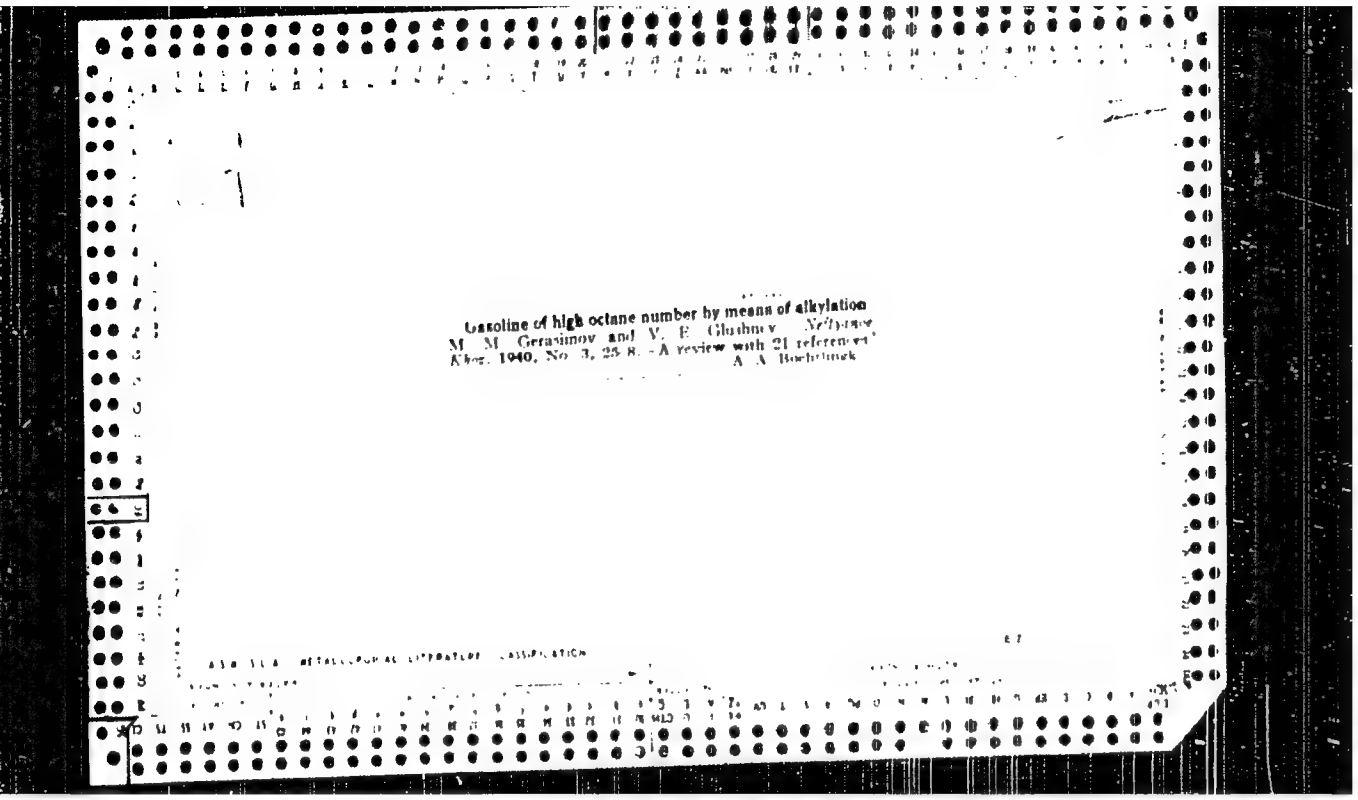
Refining and desulfurizing straight-run and cracked gasolines with phosphoric acid M. M. Gerasimov and V. I. Glushnev. *Neftyanoe Khoz.* 1940, No. 1, 22-5

Pearow carriers, such as coke 1-3 mm. in diam., were impregnated with a 25 or 82% soln. of H_3PO_4 during 4 hrs. Gasolines obtained by cracking in the presence of an Dubbs-at process had before vapor-phase treatment with H_3PO_4 d_{20} = 0.7810-0.7878, gums 55.6-142 mg. per 100 cc., acidity 15.5-149.9 mg., octane no. 71-77. The treated gasoline had d_{20} = 0.7742-0.7720, actual gum 2-6 mg. per 100 cc. and octane no. 80-0. The straight run gasoline treated with H_3PO_4 contained originally 0.47% S. this decreased to 0.11% after the above treatment and washing with NaOH. This catalyst retains its activity a long time, probably because it is regenerated during the process. The appts. and app. used are described.

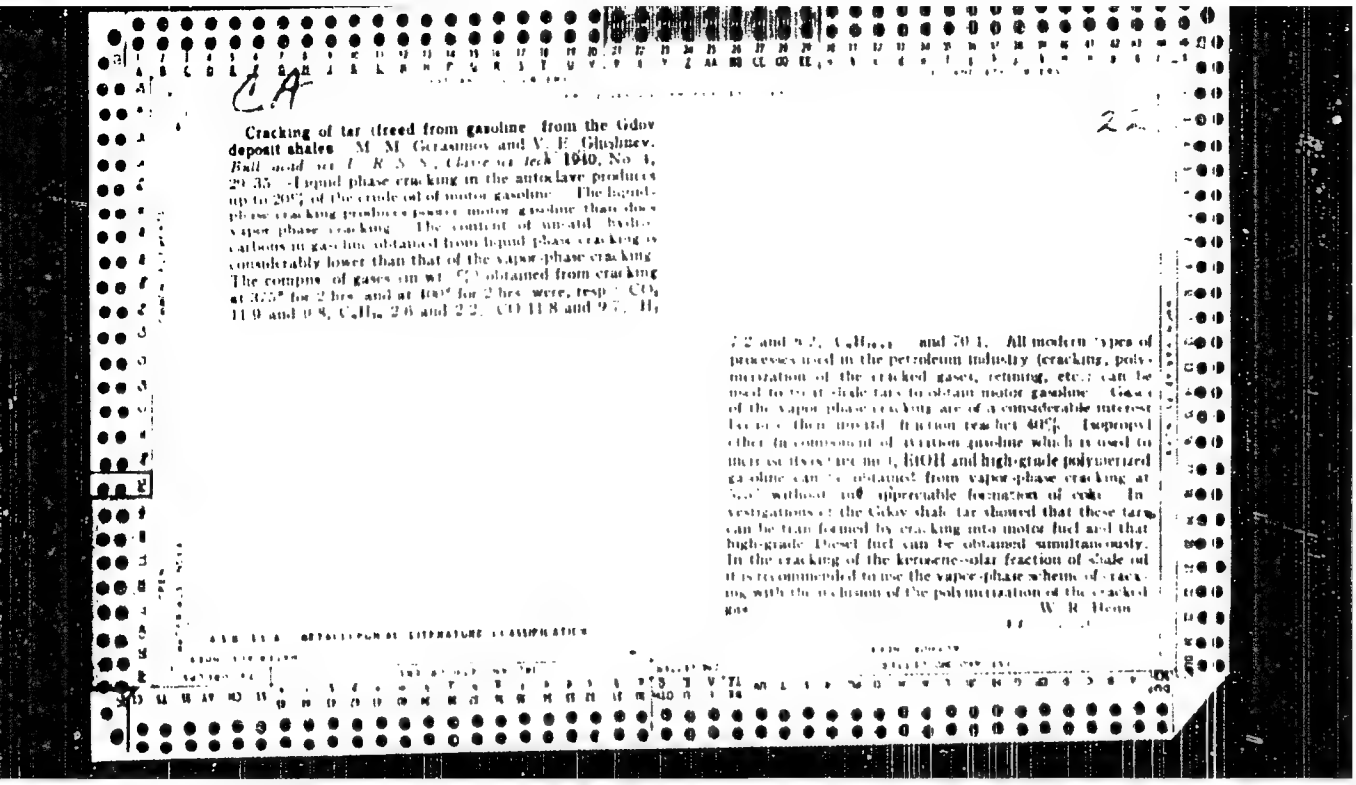
V. A. Bochtlingk

2

Refinery treatment of liquid phase cracked gasoline with zinc chloride. M. M. [illegible], V. E. [illegible], S. I. Vasil'ev, and [illegible]. *Neftyanoe Khoz.* 1940, No. 2, [illegible]. [illegible] cracked [illegible] was treated with $ZnCl_2$ [illegible] for 3 hrs. and dried [illegible] surface about 1%, $ZnCl_2$ [illegible]. The cracked gasoline was washed with water and then had the [illegible], acidity [illegible], induction period 240 min. (without inhibitor) and [illegible]. This gasoline treated in the vapor phase with $ZnCl_2$ gave a product of the same grade as that obtained in the lab. equipment. A. A. B.



Gasoline of high octane number by means of alkylation
M. M. Gerasimov and V. P. Glushnev. *Neftyanoe*
Khoz. 1940, No. 3, 25-8. - A review with 21 references.
A. A. Bochinsk



CA

Cracking of tar (freed from gasoline) from the Gdov deposit shales. M. M. Gerasimov and V. F. Glushnev. *Bull. acad. sci. U. R. S. S., Classe sci. tech.* 1940, No. 1, 29-35.—Liquid phase cracking in the autoclave produces up to 20% of the crude oil of motor gasoline. The liquid-phase cracking produces poorer motor gasoline than does vapor phase cracking. The content of unsatd. hydrocarbons in gasoline obtained from liquid phase cracking is considerably lower than that of the vapor-phase cracking. The compns. of gases (in wt. %) obtained from cracking at 375° for 2 hrs. and at 400° for 2 hrs. were, resp.: CO_2 11.9 and 9.8, C_nH_{2n} 2.6 and 2.2, CO 11.8 and 9.7, H_2 7.2 and 9.2, C_nH_{2n+2} and 70.1. All modern types of processes used in the petroleum industry (cracking, polymerization of the cracked gases, refining, etc.) can be used to treat shale tars to obtain motor gasoline. Gases of the vapor phase cracking are of a considerable interest because their unsatd. fraction reaches 40%. Isopropyl ether (a component of aviation gasoline which is used to increase its octane no.), BTOH and high-grade polymerized gasoline can be obtained from vapor-phase cracking at 500° without any appreciable formation of coke. Investigations of the Gdov shale tar showed that these tars can be transformed by cracking into motor fuel and that high-grade Diesel fuel can be obtained simultaneously. In the cracking of the kerosene-solar fraction of shale oil it is recommended to use the vapor-phase scheme of cracking, with the exclusion of the polymerization of the cracked gas.

W. R. Henn

22

Distillation of shale tar cracked distillates with zinc chloride M. M. Gerasimov, V. E. Glushnev and S. N. Sokolov. *Bull. acad.* [illegible] 1940, No. 5, [illegible] 34, [illegible] Refining cracked gasolines with H_2SO_4 does not produce a stable product. Losses from H_2SO_4 [illegible] than from refining the gasolines with $ZnCl_2$. The losses from H_2SO_4 refining reach as much as [illegible]. Refining the vapor-phase shale gasoline with [illegible] $ZnCl_2$ produces a stable gasoline with [illegible] induction period owing to the presence of natural inhibitors and with a small content of the natural [illegible]. The vapor phase shale gasoline refined with $ZnCl_2$ [illegible] fraction) had the following characteristics [illegible] acidity after refining and washing with water [illegible] mg. of KOH per 100 cc. of gasoline, octane no. 71, resin content [illegible] 0.865. It contained neutral O compds. [illegible], unsatd. compds. 33.0%, aromatic compds. 23.[illegible]%, naphthenes [illegible] paraffins 36.5%. Distn. according to Engler yielded: beginning of boiling 71, up to 80° [illegible], to 90° [illegible], to 100° 11.0%, to 110° 24.0%, to 120° [illegible], to 130° 42.5%, to 140° 51.0%, to 150° 58.5%, to 160° [illegible], to 170° 71.0%, to 180° 79.0%, to 190° 87.0%, to 200° 91.8%, to 210° 93.8%, final boiling temp. 216°. The total yield was 96%. Results of the expts. showed that the method can be used for obtaining cracked shale tar gasolines. Refining the crude cracked shale distillate with $ZnCl_2$ produces a gasoline suitable for motor fuel. Eight references. W. R. Henn

PROCESSES AND PROPERTIES INDEX

22

Modern methods of refining and desulfurizing cracked gasolines. M. M. Gerasimov and V. L. Gladkaya. *Neftyanoe Khoz.* S. S. S. R. 1940, No. 5, 25-30.—A review of methods used in Russia and in the United States with 33 references. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GLUSHNEV, V. Ye. and GERASIMOV, M. M.

"Natural Petroleum Gases and Cracking Gases of the USSR and Their Processing Methods," Iz. Ak. Nauk SSSR, Otdel Tekh.Nauk, No.5, pp 135-36, 1940

Translation W-24554, 25 Nov 52

Degree of refining of cracked gasolines as dependent upon the amount of zinc chloride on the carrier. M. M. Gerasimov and V. E. Glushnev. *Neftyanoe Khoz.* [illegible] S. S. R. 1940, No. 2, 70-5; cf. C. A. 35, [illegible] According to the expts. carried out on a lab. scale, wet vapor-phase cracked gasoline at 250-255° the induction period is increased, the gum formation lowered with increase in the amt. of $ZnCl_2$ [illegible] coke [illegible] 21 and 86 [illegible]. During the treatment, complexes of $ZnCl_2$ with unsatd. compds. are formed, lowering the activity of the catalyst. The catalyst can be [illegible] by flushing with hot refined gasoline, [illegible] activity for a long time. A. A. Boehtlingk

CA 22

Preliminary extraction of distillates of the liquid phase cracking in the treatment with zinc chloride. M. M. Gavrilov and V. I. Glushkov. [illegible] *Neft.* 1940, No. 7-8, 35-5; cf. *C. A.* **36**, 1174[?]. All expts. were undertaken with a 15% deposit of $ZnCl_2$ on coke (size of grain 1-3 mm.) at 230-250° and a feed rate of 50 cc. per hr. A pressure distillate which was not purified and not extd. (preliminarily) with NaOH, but in one case treated with $NaHCO_3$ and in another with NaOH has a greater induction period (without inhibitors) and is lower in potential gum. The amt. of actual gum is also lower for the unpurified and untreated pressure distillate. The same is true for light and automobile gasolines obtained in the process of refining a distillate with $ZnCl_2$ that had not been first treated with NaOH, i. e., they have a longer induction period (without the inhibitor) and a smaller amt. of potential gum. Thus, better results are obtained with pressure distillates as well as with gasolines without a preliminary treatment or purification.

A. A. Bochtlinck

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KAFTLYUCHENKO, V. A., Corr Memb of Academy of Science; [illegible]; GLUSHENKO, V. Ye.

"Modern Methods of Processing Petroleum Gas into High Octane Fuel," Izv. Ak. Nauk USSR, Otd. Tekh. Nauk, No. 9, 1946. Submitted 15 Jan 1946.

Report U-1510, 4 Oct 1951

PROCESSES AND PROPERTIES INDEX

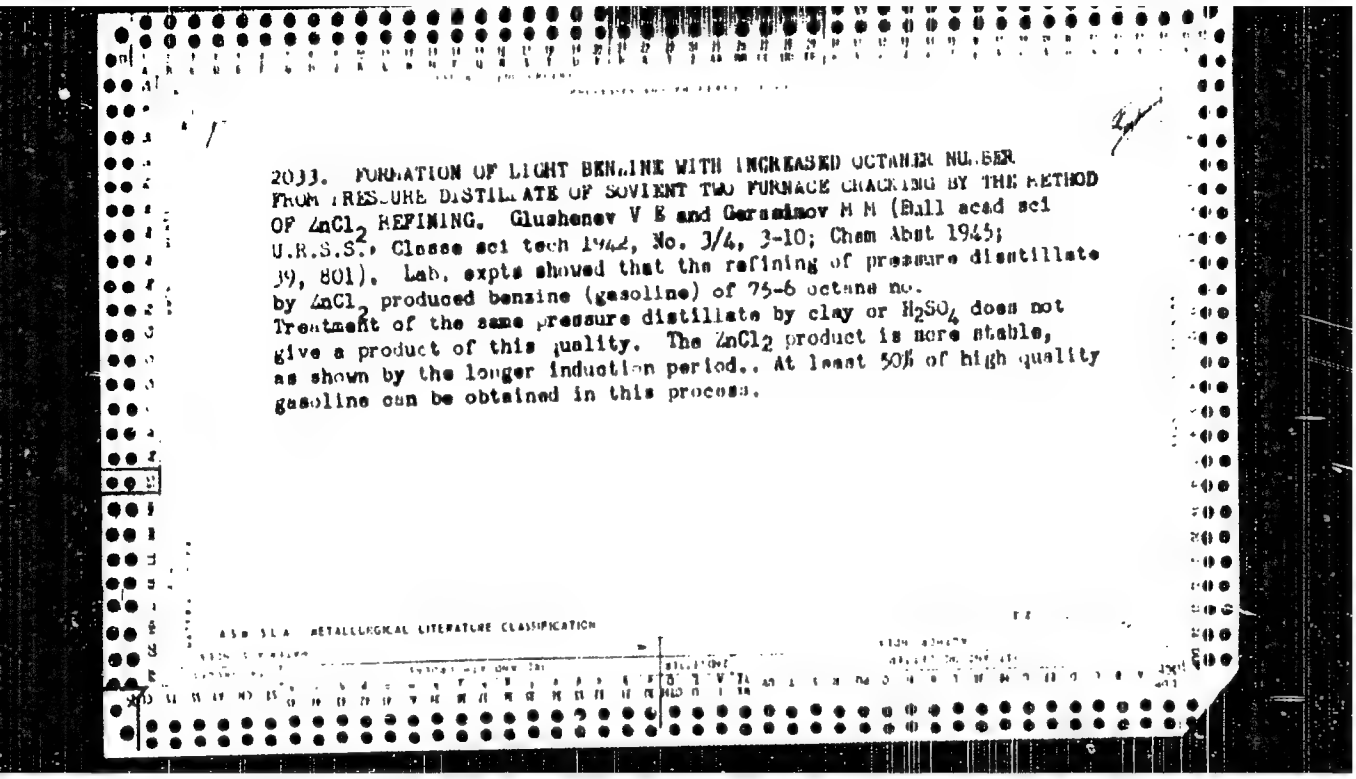
Ca

10

Effects of zinc chloride on octyl alcohol. M. M. [illegible] mov and V. E. Ghishnev. *Compt. rend. acad. sci. U. R. S. S.* 29, 462-5(1940)(in English).—Into a reaction tube contg. 200 cc. of pumice grains impregnated with 32.6% by wt. of $ZnCl_2$ and surrounded by an elec. furnace, octyl alc. (d_4^{20} 0.8273, n^{20} 1.4304, f.p. 13.31, b. 186-90°) was passed at a rate of 50 cc. per hr. at 225, 250, 275 and 325°. The $ZnCl_2$ reacted vigorously with the octyl alc. vapor, the yield of liquid products increasing with temp. The fractions (118-20° and 120-52.5°) contained mostly octenes from the dehydration of the alc. The dehydration also yielded other unsatd. hydrocarbons, below 3° hexenes and heptenes, 88-116° heptenes, and 152.5-80° olefins condensation products. The 180-90° fraction contained aldehydes. Blanks run without $ZnCl_2$ showed only small changes in the starting material. Water sepd. in the $ZnCl_2$ reactions, the amt. increasing with the temp. Gaseous products in the runs included isobutylene, propylene (predominantly) and ethylene as well as satd. hydrocarbons and H. Phys. data and analyses of the fractions are given. Sara Anne Cassiday

Inst. Mineral Fuels, AS USSR

METALLURGICAL LITERATURE CLASSIFICATION



2033. FORMATION OF LIGHT BENZINE WITH INCREASED OCTANE NUMBER FROM PRESSURE DISTILLATE OF SOVIENT TWO FURNACE CRACKING BY THE METHOD OF $ZnCl_2$ REFINING. Glushenev V E and Gerasimov M N (Bull acad sci U.R.S.S., Classe sci tech 1942, No. 3/4, 3-10; Chem Abst 1945; 39, 801). Lab. expts showed that the refining of pressure distillate by $ZnCl_2$ produced benzine (gasoline) of 75-6 octane no. Treatment of the same pressure distillate by clay or H_2SO_4 does not give a product of this quality. The $ZnCl_2$ product is more stable, as shown by the longer induction period.. At least 50% of high quality gasoline can be obtained in this process.

ASB STA METALLURGICAL LITERATURE CLASSIFICATION

USSR/Petroleum - Cracking
Gasoline - Production

Dec 1946

"The Dehydrogenating Action of Zinc Chloride in the Refining of Gasoline Produced by Vapor Phase Oxidation Cracking," V. Ye. Glushnev, N. G. Bulgakova, 7 pp

"Iz Ak Nauk, Otd Tekh Nauk" No 12, pp. 1613-1619

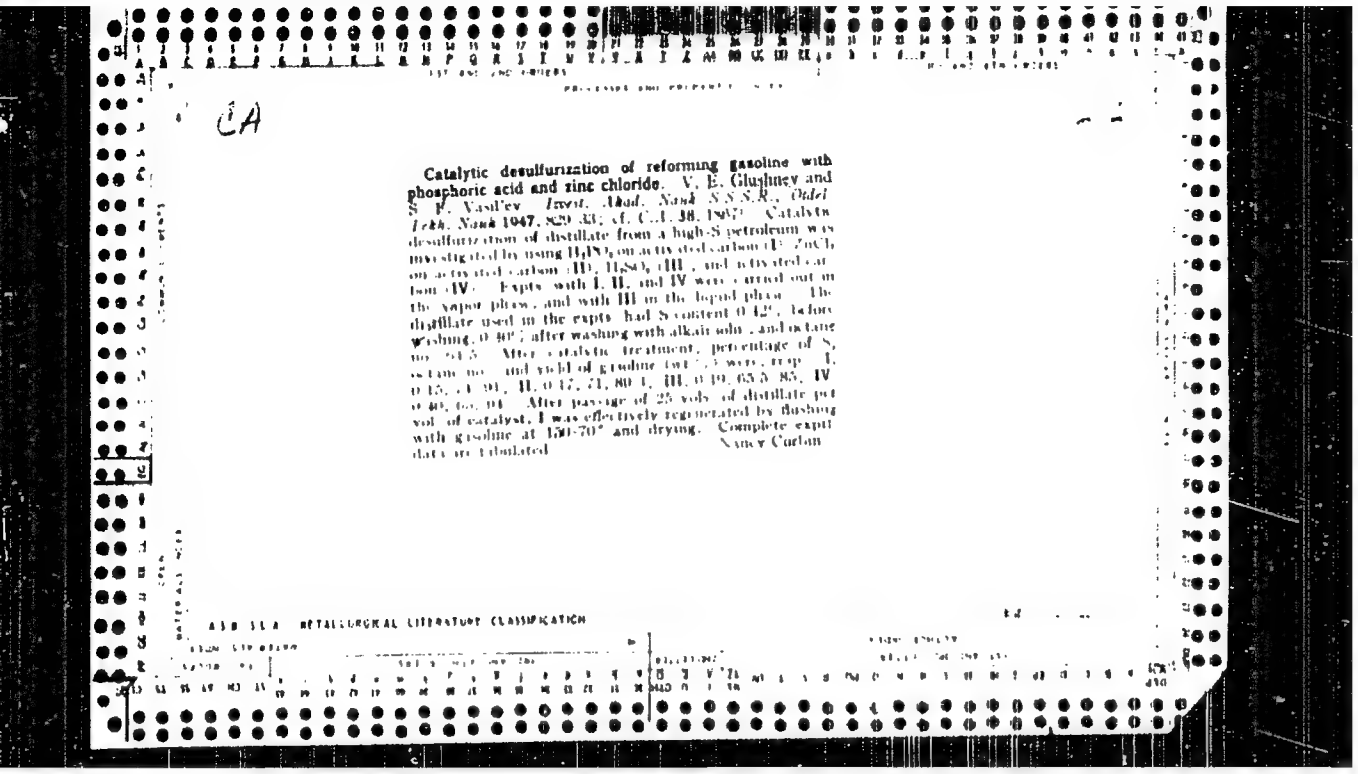
The presence of a dehydrogenating action is established in the refining of gasoline by oxidizing cracking with zinc chloride. The dehydrogenating reaction under the influence of zinc chloride can be due to the presence of some saturated spirits as well as cyclic ketones in gasoline oxidation cracking.

ID

27T83

CA

Oxidative reforming of gasolines of the Tuimazin Devonian petroleum. S. F. Vasil'ev and V. I. Glushkov. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1947, 825-8; cf. C.A. 41, 7717*h*. Oxidative reforming of high-S [illegible] Devonian crude oil was found to give good [illegible] coke recycling, operated at approx. [illegible] pressure without coke formation in the reaction zone, and yielded a product with low S and relatively high aromatic content. The crude [illegible] was treated in a lab. app. processing [illegible] kg. [illegible] by heating to 450-[illegible], mixing with O with or without heated steam, heating the mixt. to 540-[illegible], and [illegible] the cracked products. The liquid products were rectified and the distillate was worked up with 5% NaOH soln. for [illegible] [illegible] part of the S. Further [illegible] of S was effected by catalytic treatment in the vapor phase [illegible] [illegible] ZnCl₂. [illegible] the following data were obtained on (1) gasoline from straight distn. of Devonian crude oil, (2) the lower-boiling fraction from oxidative reforming, further purified with ZnCl₂, and (3) the higher-boiling fraction (motor gasoline) from oxidative reforming, resp.: yield, wt. %, of crude oil, 20, 56.3, 69.5; sp. gr., 0.729, 0.744, 0.741; initial b.p., 55, 62, 47 [illegible]; [illegible] b.p., 136, 115, 120; end b.p., 212, 164, 195 [illegible]; [illegible] 0.028, 0.000, 0.028; unsatd. compds. [illegible]; aromatics [illegible] 18.12, 22.60, 23.61; naphthenes [illegible] 14.51 [illegible]; paraffins [illegible] 20.7, 16.86, 20.45 [illegible] [illegible] with 1 ml. PbEt₄ [illegible] octane no. [illegible] pure, 10.0, 63.2, 61, with 1 ml. PbEt₄ [illegible] with 2 ml. PbEt₄ [illegible]; [illegible] with 4 ml. PbEt₄ [illegible] 85.8. In this expt. 21.6% (based on crude oil) of gas was produced, consisting of [illegible] unsatd. hydrocarbons. S. C.

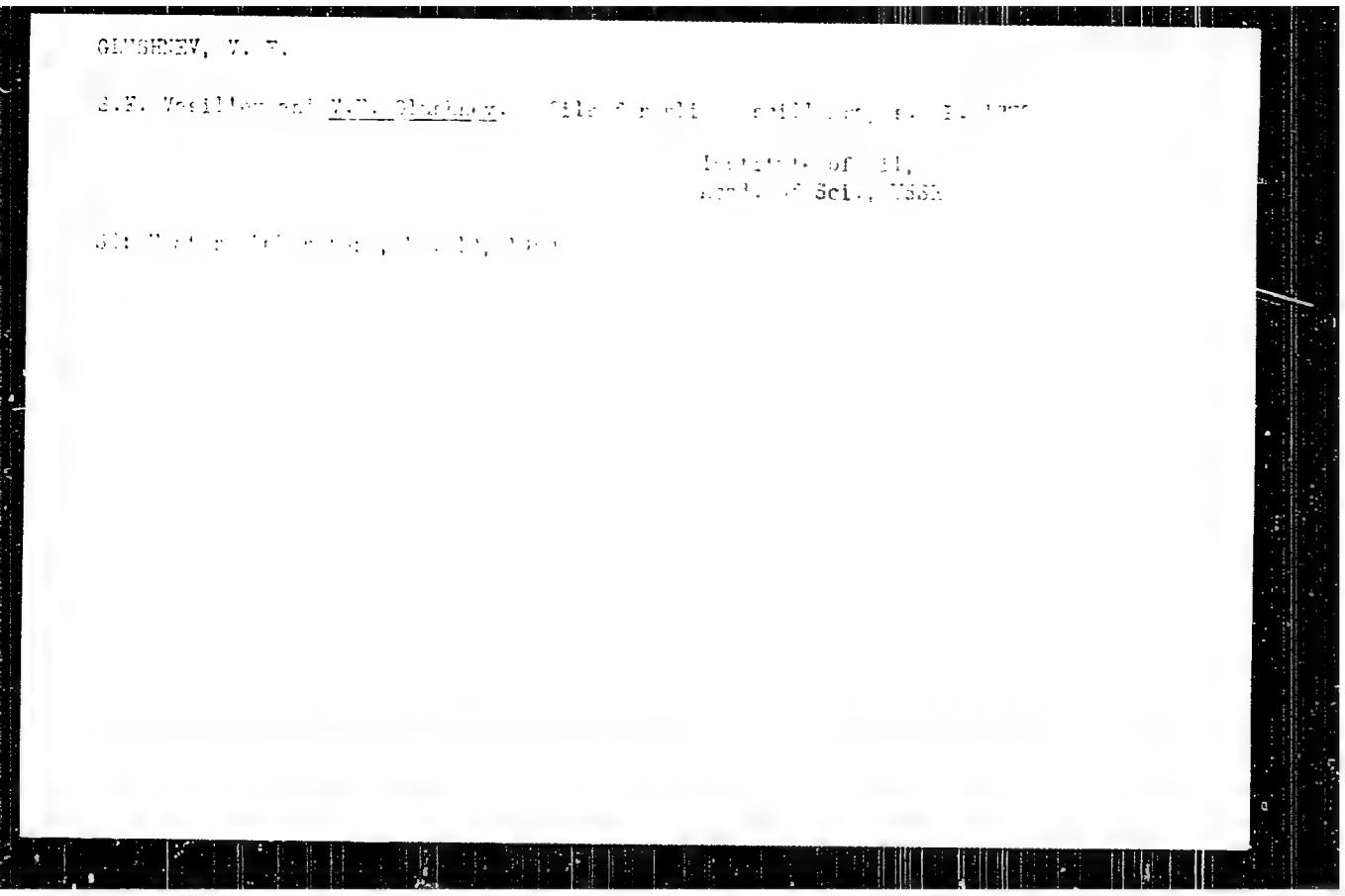


CA

Catalytic desulfurization of reforming gasoline with phosphoric acid and zinc chloride. V. E. Glushnev and S. F. Vasil'ev. *Izvest. Akad. Nauk S.S.S.R., Otdel Tekh. Nauk* 1947, 829-33; cf. C.A. 38, 1907. Catalytic desulfurization of distillate from a high-S petroleum was investigated by using H_3PO_4 on activated carbon (I), $ZnCl_2$ on activated carbon (II), H_2SO_4 (III), and activated carbon (IV). Expts with I, II, and IV were carried out in the vapor phase, and with III in the liquid phase. The distillate used in the expts had S content 0.42%, before washing, 0.40% after washing with alkali soln., and octane no. 58.5. After catalytic treatment, percentage of S, octane no., and yield of gasoline (wt.%) were, resp.: I, 0.15, 71.91; II, 0.17, 71, 80.1; III, 0.19, 65.5, 85; IV 0.40, 6.., 91. After passage of 25 vols. of distillate per vol. of catalyst, I was effectively regenerated by flushing with gasoline at 150-70° and drying. Complete experimental data are tabulated.

Nancy Carlon

A S B S L A METALLURGICAL LITERATURE CLASSIFICATION



GLUSHKEV, V. F.

S.F. Vasil'ev and V.F. Glushkov. [illegible]

[illegible] of [illegible],
[illegible] of Sci., USSR

[illegible]

USSR /Chemical Technology. Chemical Products and Their Application I-16

Treatment of natural gases and petroleum. Motor fuels. Lubricants.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31903

Author : Glushnev V. Ye., Nepryakhina A. V.

Inst : Petroleum Institute, Academy of Sciences USSR

Title : Chemical Composition of Gasolines of Primary Oxidative Cracking

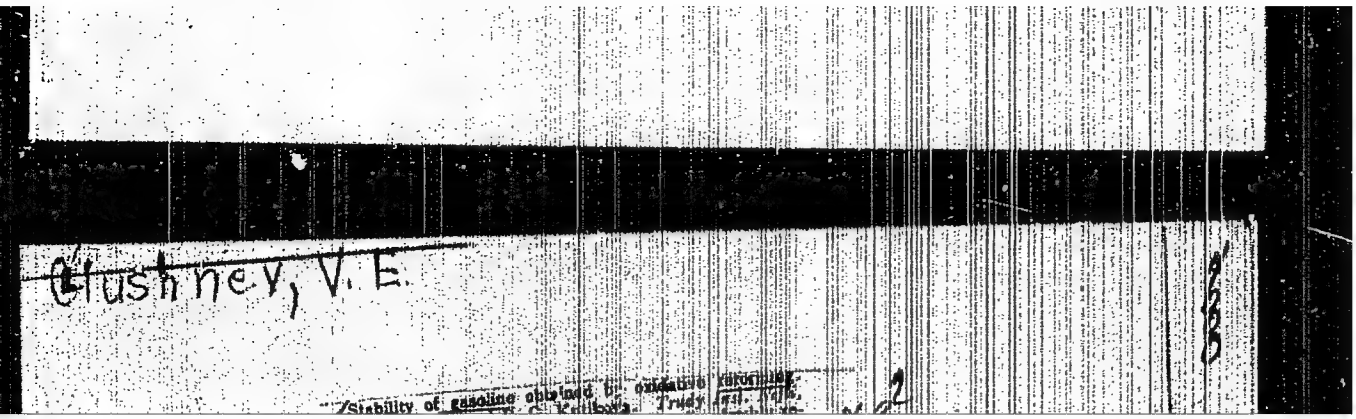
Orig Pub: Tr. In-ta nefti AN SSSR, 1954, 4, 31-37

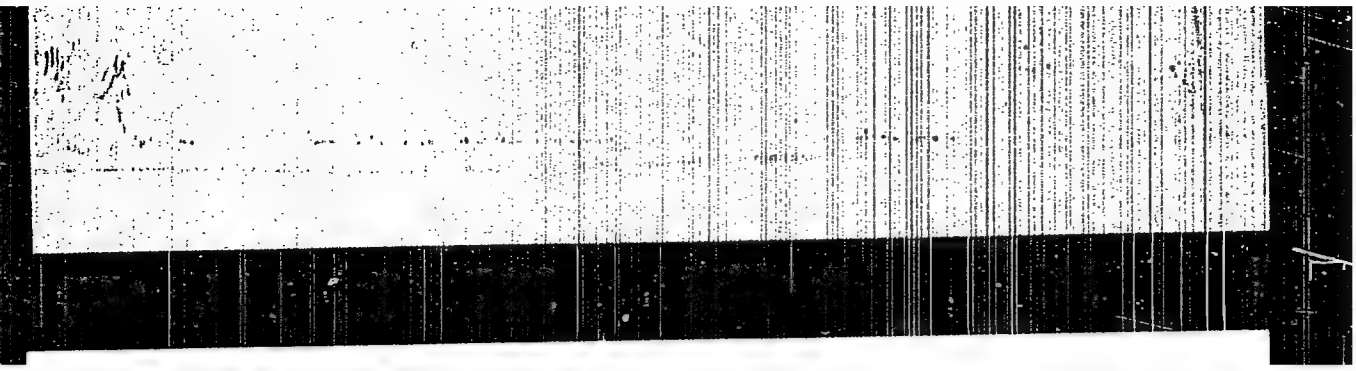
Abstract: Bibliography 7 references.

Card 1/1

GLUSHNEV, V.Ye.; NEPRYAKHINA, A.V.; ANDREYEVA, T.P.

Characteristics of hydrocarbon composition of gasolines of oxidative cracking and reforming. Trudy Inst.nefti 4:38-46 '54.
(Gasoline) (Hydrocarbons) (MLRA 8:1)





APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515430002-1"

S/081/62/000/009/019/075
B158/B101

5.4600

AUTHORS: Topchiyev, A. V., Polak, L. S., Chernyak, N. Ya., Glushnev, V. Ye., Glazunov, F. Ya., Vereshchinskiy, I. V., Syrkus, N. P., Breger, A. Kh., Vaynshteyn, B. I.

TITLE: Radiation-heat cracking of hycrocarbons

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 74 - 75, abstract 9B515 (Sb. "Radioakt. izotopy i ikh primen. izucheniya v nar. kh-ve SSSR. v. I". M., Gostoptekhizdat, 1961, 206-210)

TEXT: The low overall yield of radiolysis products from hydrocarbons at room temperature points to the absence of a chain reaction at that temperature. To examine the possibilities of a chain reaction in radiation cracking, n-heptane was irradiated by Co^{60} γ-rays at high temperatures. The samples were irradiated in 15 ml bulbs made of molybdenum glass with a wall thickness of 1 mm. The amount of liquid heptane was 0.25 ml and the pressure in the ampoules on vaporization 2.5 T/273 atm. To prevent local preheating of the walls, the bulb was rotated twice a second. The

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S/081/62/000/009/019/075
B158/B101

Radiation-heat cracking of hydrocarbons

radiation dose output calculated on 1 ml of liquid n-heptane was $2 \cdot 10^{13}$ Mev/sec. It is shown that radiation-heat cracking of n-heptane occurs at considerably lower temperatures than purely thermal cracking which needs a temperature of ~500°C. The yield of liquid unsaturated hydrocarbons from radiation-heat cracking increases from 1.6 at room temperature to 340 at 450°C. The total radiation-chemical yield of low molecular hydrocarbons is 2000 at 400°C, being therefore ~10^3 times as great compared with the radiation-chemical yield of the same products at 20°C. By combining the radiation effect with temperature it is possible to obtain products which offer industrial interest at levels of yield which would be acceptable in practice. Possible sources of radiation for radiation-heat cracking are considered. [Abstracter's note: Complete translation.]

Card 2/2

GLUSHAKOV V.F.

PHASE I BOOK EXPLOITATION SOV/6177

Akademiya nauk SSSR. Institut neftekhimicheskogo sinteza

Radioliz uglevodorodov; nekotoryye fiziko-khimicheskiye problemy (Radiolysis of Hydrocarbons; Some Physicochemical Problems) Moscow, Izd-vo AN SSSR, 1962. 207 p. Errata slip inserted. 5000 copies printed.

Resp. Eds.: A. V. Topchiyev, Academician, and L. S. Polak, Doctor of Physics and Mathematics; Ed.: L. T. Bugayenko; Tech Ed.: Ch. A. Zentsel'skaya.

PURPOSE: This book is intended for physical and industrial chemists interested in the properties and behavior of irradiated hydrocarbons.

COVERAGE: The book gives a systematic presentation of the results of research on the radiolysis of hydrocarbons carried out from 1957 through 1961 at the Laboratory of Radiation Chemistry, Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petro-

Card 1/4

chemical Synthesis, Academy of Sciences USSR). Although the results were obtained for individual compounds, they may be generalized and applied to other members of the same homologous series. The following persons participated in making the experiments and in writing the text: V. G. Beryezkin, V. E. Glushnev, Yu. A. Kolbanovskiy, I. M. Kustanovich, V. D. Popov, A. Ya. Temkin, V. D. Timofeyev, N. Ya. Chernyak, V. A. Shakhray, E. B. Shlikhter, A. S. Shcherbakova, B. M. Negodov, A. Z. Peryshkina, N. M. Rytova, T. A. Tegina, Yu. B. Emin, A. M. Brodskiy, V. V. Voyevodskiy, P. Ya. Glazunov, B. A. Smirnova, and Yu. L. Khait. References, mainly Soviet and English, follow individual chapters.

TABLE OF CONTENTS [Abridged]:

Radiolysis of Hydrocarbons (Cont.) SOV/6177

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AVAILABLE: Library of Congress

SUBJECT: Oil and Gas Industries

Card 4/4

BN/clb/tem
1-18-63

S/844/62/000/000/050/129
D287/D307

AUTHORS: Topchiyev, A. V., Vereshchinskiy, I. V., Glazunov, P. Ya., Glushnev, V. Ye., Polak, L. S., Ryabchikova, G. I., Sibirskaya, G. K., Timofeyev, V. D. and Chernyak, N. Ya.

TITLE: Thermal cracking of hydrocarbons induced by irradiation

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 304-307

TEXT: The effect of irradiation on thermal cracking of [illegible] thermal cracking temperatures was studied. The experiments were carried out in a countercurrent reactor, at constant throughput of the gas, using irradiation dosages of 7×10^{15} ev/sec/l in heptane. The rate of formation of gaseous products during radiation-induced and ordinary thermal cracking at 500 - 600°C was influenced by the reaction temperature. At temperatures above 550°C the relationship between the yield of products obtained by radiation and those obtained by ordinary thermal cracking was in a 4:1 ratio and radia-

Card 1/3

Thermal cracking of ... [illegible]

[illegible] process [illegible] therefore be carried out at [illegible] temperatures ([illegible] - [illegible]0°C) than ordinary therm[illegible] ([illegible]0 - 500°C). Activation energy [illegible] [illegible] [illegible] ([illegible] kcal/mole as against 50 kcal/mole for thermal cracking). The yield of [illegible] and liquid unsaturated components increased [illegible] with temperature and reached [illegible]15,000 [illegible] 100 [illegible]. At temperatures >500°C the radiation yield became lower. The yield of unsaturated compounds increased sharply with temperature and reached 90% (as against 50 - 55% during ordinary thermal cracking). Optimum conditions for the above process were [illegible] [illegible] [illegible]tion and short contact times. There are [illegible] figures.

ASSOCIATION: Institut neftekhimicheskogo sinteza, AN SSSR (Institute of Petrochemical Synthesis, AS USSR); Institut fizicheskoy khimii, AN SSSR (Institute of Physical Chemistry, AS USSR)

Card [illegible]

S/204/62/002/002/005/007
I060/I242

AUTHORS: Topchiyev, A.V., Polak, L.S., Glushnev, V.Ye., Popov, V.T., Timofeyev, V.D., Glazunov, P.Ya., and Ryabchikova, G.G.

TITLE: Radiation-thermal cracking of petroleum hydrocarbons

PERIODICAL: Neftekhimiya, v.2, no.2, 1962, 196-210

TEXT: This is the first in a series of papers reporting on the basic problems of the radiation-thermal cracking (RTC) process. Investigation deals with the following subjects: 1. RTC of heptane under static conditions; 2. RTC in continuous process in a decreasing field; 3. RTC in a continuous process in a uniform field; 4. Influence of pressure on RTC; 5. RTC in a mixed field of n and γ radiations; 6. Calculation of kinetics, mechanism, and thermodynamic parameters of RTC, and its comparison with other types of cracking and pyrolysis.

Card 1/2

S/20:/62/002/002/005/007
I060/I242

Radiation-thermal cracking...

This paper compares the first two methods with thermal cracking under the same conditions. The activation energy of the RTC process is very close to the activation energy of thermal cracking. With the rise in the temperature of the RTC process the yield of liquid and gaseous products increases sharply. The output of unsaturated compounds, both gaseous and liquid per unit of crude is considerably higher with the RTC method than with thermal cracking under the same conditions. The rate of the RTC process increases sharply through the action of ionizing radiation. There are 15 figures and 11 tables.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petrochemical Synthesis, AS USSR) and Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AS USSR)

SUBMITTED: March 1, 1962

Card 2/2

L 58478-65 ENG(j)/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(c)/EWA(l) Pr-4/Pr-4/Pab RM
ACCESSION NR: AP5015241 UR/0286/65/000/009/0023/0023
541.15:547.313.2

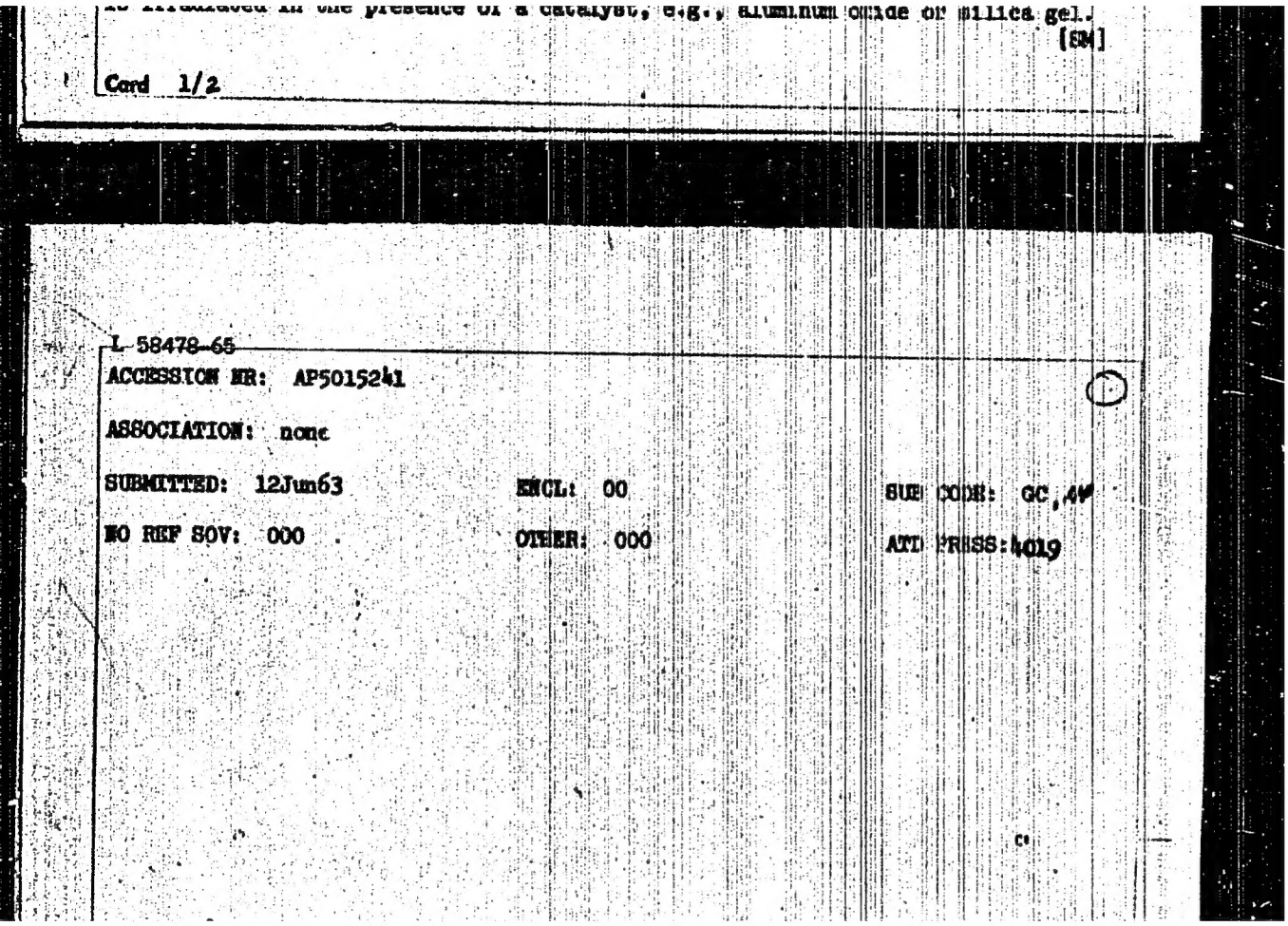
AUTHOR: Glushnev, V. Ye.; Kolbanovskiy, Yu. A.; Patalakh, I. I.; Polak, L. S.; Popov, V. T.; Shakhray, V. A.

TITLE: Radiation-induced synthesis of organic compounds with various functional groups. Class 12, No. 170503

SOURCE: Byulleten' izobreteniy i tovarnykh znakov no. 9, 1965, 23

TOPIC TAGS: radiation, radiation induced synthesis

ABSTRACT: An Author Certificate has been issued for a radiation-induced synthesis of organic compounds having various functional groups, such as carboxylic acids, amines, nitro and nitroso compounds, thio compounds, alcohols, etc. The method



...is initiated in the presence of a catalyst, e.g., aluminum oxide or silica gel.
[SM]

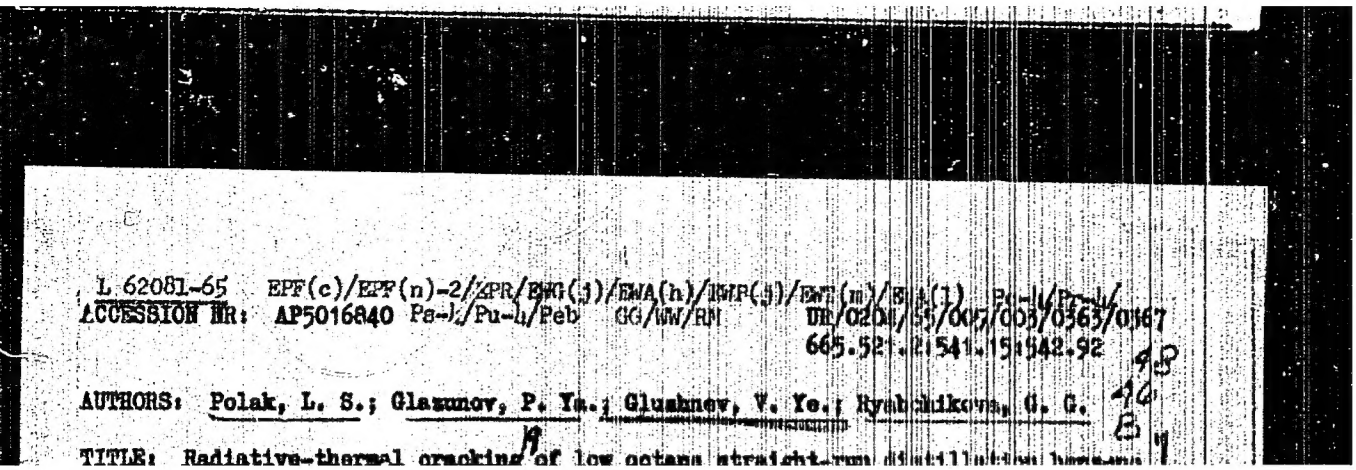
Card 1/2

L 58478-65
ACCESSION NR: AP5015241

ASSOCIATION: none

SUBMITTED: 12Jun63 ENCL: 00 SUB CODE: GC, AP

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4019



L 62081-65 EPF(c)/EPF(n)-2/ZPR/EWG(j)/EWA(h)/EWP(j)/EWT(m)/BDS(l) Ps-4/Pt-4/
ACCESSION NR: AP5016840 Pa-4/Pu-4/Peb GG/WW/RM UR/0204/65/005/003/0363/0367
665.521.2:541.15:542.92

AUTHORS: Polak, L. S.; Glazunov, P. Ya.; Glushnev, V. Ye.; Kyuhankova, G. G.

TITLE: Radiative-thermal cracking of low octane straight-run distillate hydrocarbons

in a uniform temperature field

SOURCE: Neftekhimiya, v. 5, no. 3, 1965, 363-367

TOPIC TAGS: benzene, distillation, reactor, radiation effect, thermal decomposition

ABSTRACT: The present work is a continuation of an earlier investigation. The present experiments were conducted with an improved electron source reactor in which a uniform temperature field could be established. Low-octane straight-run distillation benzene (with the end of boiling at 140C) was cracked at 500, 550, and 600C at the pump-through-velocity of 150 ml/hour in the reactor shown schematically. Yield and composition of the thermal and radiation-thermal cracking products of the same benzene in the reactors with and without a uniform temperature field were tabulated